

GenCore version 5.1.8
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OM nucleic - nucleic search, using sw model

Run on: May 9, 2006, 15:53:00 ; Search time 0.001 Seconds
(without alignments)
6.118 Million cell updates/sec

Title: US-09-904-968A-19-COPY
Perfect score: 19
Sequence: 1 ggcgcgcgtgagcaag 19

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 12 seqs, 161 residues

Total number of hits satisfying chosen parameters: 24

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 12 summaries

Database : pubnewdb19.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	13.8	72.6	19	US-11-101-244-1549197	Sequence 1549197,
2	13.8	72.6	19	US-11-083-784-1549197	Sequence 1549197,
3	13.2	69.5	18	US-10-310-914A-311309	Sequence 311309,
4	11.2	58.9	16	US-10-939-294A-15139	Sequence 15139, A
5	9	47.4	12	US-11-103-122-25	Sequence 25, Appl
6	9	47.4	12	US-11-103-122-25	Sequence 25, Appl
7	8.4	44.2	11	US-11-158-209-198	Sequence 198, App
8	8.4	44.2	11	US-11-158-209-473	Sequence 473, App
9	8.4	44.2	11	US-11-158-209-829	Sequence 829, App
10	7.8	42.1	10	US-10-993-514-36	Sequence 36, Appl
11	7.8	41.1	11	US-11-158-209-494	Sequence 494, App
12	7.8	41.1	11	US-11-158-209-1172	Sequence 1172, Ap

ALIGNMENTS

RESULT 1
US-11-101-244-1549197
; Sequence 1549197, Application US/11101244
; Publication No. US20050246794A1
; GENERAL INFORMATION:
; APPLICANT: Dharmacon, Inc.
; APPLICANT: Khvorova, Anastasia
; APPLICANT: Reynolds, Angela
; APPLICANT: Leake, Devin
; APPLICANT: Marshall, William
; APPLICANT: Scaringe, Stephen
; TITLE OF INVENTION: Functional and Hyperfunctional siRNA
; FILE REFERENCE: 134990S
; CURRENT APPLICATION NUMBER: US/11/101,244
; CURRENT FILING DATE: 2005-04-07
; PRIOR APPLICATION NUMBER: 60/502,050

Prior Filing Date: 2003-09-10
Prior Application Number: 60/426,137
Prior Filing Date: 2002-11-14
Number of SEQ ID NOS: 1591911
Software: Proprietary
SEQ ID NO 1549197
Length: 19
Type: RNA
Organism: Homo sapiens
US-11-101-244-1549197
Query Match 72.6%; Score 13.8; DB 1; Length 19;
Best Local Similarity 70.6%; Pred. No. 1.3;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

RESULT 2
US-11-083-784-1549197
; Sequence 1549197, Application US/11083784
; Publication No. US20050245475A1
; GENERAL INFORMATION:
; APPLICANT: Dharmacon, Inc.
; APPLICANT: Khvorova, Anastasia
; APPLICANT: Reynolds, Angela
; APPLICANT: Leake, Devin
; APPLICANT: Marshall, William
; APPLICANT: Scaringe, Stephen
; TITLE OF INVENTION: Functional and Hyperfunctional siRNA
; FILE REFERENCE: 134990S
; CURRENT APPLICATION NUMBER: US/11/083,784
; CURRENT FILING DATE: 2005-03-18
; PRIOR APPLICATION NUMBER: US/10/714,333
; PRIOR FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: 60/502,050
; PRIOR FILING DATE: 2003-09-10
; PRIOR APPLICATION NUMBER: 60/426,137
; PRIOR FILING DATE: 2002-11-14
; NUMBER OF SEQ ID NOS: 1591911
; SOFTWARE: Proprietary
; SEQ ID NO 1549197
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Homo sapiens
US-11-083-784-1549197
Query Match 72.6%; Score 13.8; DB 1; Length 19;
Best Local Similarity 70.6%; Pred. No. 1.3;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGTGCGCGTGTGGCGAA 17
DB 2 GGUGGAGCUGUGCGCGAA 18

RESULT 3
US-10-310-914A-311309
; Sequence 311309, Application US/10310914A
; Publication No. US20060003322A1
; GENERAL INFORMATION:
; APPLICANT: Bentwich, Isaac
; APPLICANT: Shlier, Kivuzat
; TITLE OF INVENTION: Bioinformatically detectable group of novel regulatory genes and
; FILE REFERENCE: 06087.0200.CPUS01
; CURRENT APPLICATION NUMBER: US/10/310,914A
; CURRENT FILING DATE: 2002-12-06
; NUMBER OF SEQ ID NOS: 1388402
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 311309

```

; LENGTH: 18
; TYPE: RNA
; ORGANISM: Human
US-10-310-914A-311309
```

```
Query Match          69.5%; Score 13.2; DB 1; Length 18;
Best Local Similarity 72.2%; Pred. No. 1.5;
Matches 13; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      1 GGTGCGCGCTGTGCGGAAG 18
         |||||:|||||
Db       1 GCGCCGGCGCUGGAGAAG 18
```

```
RESULT 4
US-10-939-294A-15139/c
; Sequence 15139, Application US/10939294A
; Publication No. US20050266417A1
; GENERAL INFORMATION:
; APPLICANT: Barany, Francis
; APPLICANT: Turner, Daniel
; APPLICANT: Pingie, Maneesh
; APPLICANT: Pincas, Hanna
; TITLE OF INVENTION: Methods for identifying target nucleic acid molecules
; FILE REFERENCE: 19603/4121 (CRP D-2995-02)
; CURRENT APPLICATION NUMBER: US/10/939,294A
; CURRENT FILING DATE: 2004-09-10
; PRIOR APPLICATION NUMBER: US 60/502/731
; PRIOR FILING DATE: 2003-09-12
; NUMBER OF SEQ ID NOS: 38895
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 15139
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide probe
US-10-939-294A-15139
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Query Match          58.9%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 2.7;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      1 GGTGCGCGCTGTGCGGA 16
         |||||:|||||
Db       16 GGTGCGGAGCGGCGGA 1
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```
RESULT 5
US-11-103-122-25/c
; Sequence 25, Application US/11103122
; Publication No. US20050282190A1
; GENERAL INFORMATION:
; APPLICANT: Shi, Hua
; APPLICANT: Lis, John T.
; TITLE OF INVENTION: MODULAR DESIGN AND CONSTRUCTION OF NUCLEIC ACID
; TITLE OF INVENTION: MOLECULES, APTAMER-DERIVED NUCLEIC ACID CONSTRUCTS, RNA
; FILE REFERENCE: 19603/4491
; CURRENT APPLICATION NUMBER: US/11/103,122
; CURRENT FILING DATE: 2005-04-11
; PRIOR APPLICATION NUMBER: 60/560,895
; PRIOR FILING DATE: 2004-04-09
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 25
; LENGTH: 12
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: functional
US-11-103-122-25
```

```
Query Match          47.4%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 4.3;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      6 CGCTGTGCG 14
         |||||
Db       9 CGCTGTGCG 1
```

```
RESULT 6
US-11-103-122-29/c
; Sequence 29, Application US/11103122
; Publication No. US20050282190A1
; GENERAL INFORMATION:
; APPLICANT: Shi, Hua
; APPLICANT: Lis, John T.
; TITLE OF INVENTION: MODULAR DESIGN AND CONSTRUCTION OF NUCLEIC ACID
; TITLE OF INVENTION: MOLECULES, APTAMER-DERIVED NUCLEIC ACID CONSTRUCTS, RNA
; FILE REFERENCE: 19603/4491
; CURRENT APPLICATION NUMBER: US/11/103,122
; CURRENT FILING DATE: 2005-04-11
; PRIOR APPLICATION NUMBER: 60/560,895
; PRIOR FILING DATE: 2004-04-09
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 29
; LENGTH: 12
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: functional
US-11-103-122-29
```

```
Query Match          47.4%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 4.3;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      6 CGCTGTGCG 14
         |||||
Db       9 CGCTGTGCG 1
```

```
RESULT 7
US-11-158-209-198
; Sequence 198, Application US/11158209
; Publication No. US2006008852A1
; GENERAL INFORMATION:
; APPLICANT: Dirk Petersohn
; APPLICANT: Kordula Schlotmann
; APPLICANT: Thomas Gassenmeier
; APPLICANT: Olaf Holtkotter
; APPLICANT: Marcus Conrad
; APPLICANT: Kay Hofmann
; TITLE OF INVENTION: Method for Determining the Homeostasis of Hairy Skin
; FILE REFERENCE: H 05667 PCT
; CURRENT APPLICATION NUMBER: US/11/158,209
; CURRENT FILING DATE: 2005-06-20
; PRIOR APPLICATION NUMBER: PCT/EP2003/014070
; PRIOR FILING DATE: 2003-12-11
; PRIOR APPLICATION NUMBER: 102 60 931.4-41
; PRIOR FILING DATE: 2002-12-20
; NUMBER OF SEQ ID NOS: 1335
; SOFTWARE: SeqWIn99, version 1.02
; SEQ ID NO 198
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-158-209-198
```

```
Query Match          44.2%; Score 8.4; DB 1; Length 11;
```

Best Local Similarity 90.0%; Pred. No. 4.8;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 9 TGTGCGGAG 18
|||
Db 1 TGTGCGGAG 10

RESULT 8

US-11-158-209-473/C
; Sequence 473, Application US/11158209
; Publication No. US20060088852A1
; GENERAL INFORMATION:
; APPLICANT: Dirk Petersohn
; APPLICANT: Kordula Schlotmann
; APPLICANT: Thomas Gassenmeier
; APPLICANT: Olaf Holtkotter
; APPLICANT: Marcus Conradt
; APPLICANT: Kay Hofmann
; TITLE OF INVENTION: Method for Determining the Homeostasis of Hairy Skin
; FILE REFERENCE: H 05667 PCT
; CURRENT APPLICATION NUMBER: US/11/158,209
; CURRENT FILING DATE: 2005-06-20
; PRIOR APPLICATION NUMBER: PCT/EP2003/014070
; PRIOR FILING DATE: 2003-12-11
; PRIOR APPLICATION NUMBER: 102 60 931.4-41
; PRIOR FILING DATE: 2002-12-20
; NUMBER OF SEQ ID NOS: 1335
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 473
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-158-209-473

Query Match 44.2%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 4.8;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGTGCGGCTG 10
|||
Db 10 GGTGCGGCTG 1

RESULT 9

US-11-158-209-829
; Sequence 829, Application US/11158209
; Publication No. US20060088852A1
; GENERAL INFORMATION:
; APPLICANT: Dirk Petersohn
; APPLICANT: Kordula Schlotmann
; APPLICANT: Thomas Gassenmeier
; APPLICANT: Olaf Holtkotter
; APPLICANT: Marcus Conradt
; APPLICANT: Kay Hofmann
; TITLE OF INVENTION: Method for Determining the Homeostasis of Hairy Skin
; FILE REFERENCE: H 05667 PCT
; CURRENT APPLICATION NUMBER: US/11/158,209
; CURRENT FILING DATE: 2005-06-20
; PRIOR APPLICATION NUMBER: PCT/EP2003/014070
; PRIOR FILING DATE: 2003-12-11
; PRIOR APPLICATION NUMBER: 102 60 931.4-41
; PRIOR FILING DATE: 2002-12-20
; NUMBER OF SEQ ID NOS: 1335
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 829
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-158-209-829

Query Match 44.2%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 4.8;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GCGCTGTG 14
|||
Db 2 GCGCTGTG 11

RESULT 10

US-10-993-514-36
; Sequence 36, Application US/10993514
; Publication No. US20050250122A1
; GENERAL INFORMATION:
; APPLICANT: Aerssens, Jeroen
; APPLICANT: Athanasiou, Maria
; APPLICANT: Brain, Carlos
; APPLICANT: Cohen, Nadine
; APPLICANT: Dain, Bradley
; APPLICANT: Denton, R. Rex
; APPLICANT: Judson, Richard S.
; APPLICANT: Ozdemir, Vural
; APPLICANT: Reed, Carol R.
; TITLE OF INVENTION: APO4 Genetic Markers Associated with Progression of Alzheimer's
; FILE REFERENCE: 2300 0080001
; CURRENT APPLICATION NUMBER: US/10/993,514
; CURRENT FILING DATE: 2004-11-22
; PRIOR APPLICATION NUMBER: US 60/524,467
; PRIOR FILING DATE: 2003-11-24
; NUMBER OF SEQ ID NOS: 64
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 36
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Reverse Primer Extension Oligo for Detecting Alleles at PS6 in
; OTHER INFORMATION: Haplotypes Comprising Preferred Embodiments of Progression
; OTHER INFORMATION: Markers I and Progression Markers II
US-10-993-514-36

Query Match 42.1%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 5;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GCGCTGTG 12
|||
Db 3 GCGCTGTG 10

RESULT 11

US-11-158-209-494
; Sequence 494, Application US/11158209
; Publication No. US20060088852A1
; GENERAL INFORMATION:
; APPLICANT: Dirk Petersohn
; APPLICANT: Kordula Schlotmann
; APPLICANT: Thomas Gassenmeier
; APPLICANT: Olaf Holtkotter
; APPLICANT: Marcus Conradt
; APPLICANT: Kay Hofmann
; TITLE OF INVENTION: Method for Determining the Homeostasis of Hairy Skin
; FILE REFERENCE: H 05667 PCT
; CURRENT APPLICATION NUMBER: US/11/158,209
; CURRENT FILING DATE: 2005-06-20
; PRIOR APPLICATION NUMBER: PCT/EP2003/014070
; PRIOR FILING DATE: 2003-12-11
; PRIOR APPLICATION NUMBER: 102 60 931.4-41
; PRIOR FILING DATE: 2002-12-20
; NUMBER OF SEQ ID NOS: 1335
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 494
; LENGTH: 11
; TYPE: DNA

! ORGANISM: Homo Sapiens
US-11-158-209-494

Query Match 41.1%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 6;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 9 TGTGGGGAAG 19
| | | | | | | | | |
Db 1 TGTGGGGAAG 11

RESULT 12

US-11-158-209-1172
; Sequence 1172, Application US/11158209
; Publication No. US2006008852A1
; GENERAL INFORMATION:
; APPLICANT: Dirk Petersohn
; APPLICANT: Kordula Schlotmann
; APPLICANT: Thomas Gassenmeier
; APPLICANT: Olaf Holtkotter
; APPLICANT: Marcus Conrad
; APPLICANT: Kay Hofmann
; TITLE OF INVENTION: Method for Determining the Homeostasis of Hairly Skin
; FILE REFERENCE: H 05667 PCT
; CURRENT APPLICATION NUMBER: US/11/158,209
; PRIOR APPLICATION NUMBER: PCT/EP2003/014070
; PRIOR FILING DATE: 2003-12-11
; PRIOR APPLICATION NUMBER: 102 60 931.4-41
; PRIOR FILING DATE: 2002-12-20
; NUMBER OF SEQ ID NOS: 1335
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 1172
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Homo Sapiens
US-11-158-209-1172

Query Match 41.1%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 6;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 GCGCTGTGGG 15
| | | | | | | | | |
Db 1 GCGCTGTGGG 11

Search completed: May 9, 2006, 15:53:00
Job time : 0.001 secs

GenCore version 5.1.8
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OM nucleic - nucleic search, using sw model

Run on: May 9, 2006, 16:40:51 ; Search time 0.001 Seconds
(without alignments)
1.024 Million cell updates/sec

Title: US-09-904-968A-20-COPY
Perfect score: 16
Sequence: 1 cggcggcgccatcgt 16

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 3 seqs, 32 residues

Total number of hits satisfying chosen parameters: 6

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 3 summaries

Database : estdb20.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	8.4	52.5	12	1	AJ587934
2	7	43.8	10	1	ACCESSION:AJ587934
3	7	43.8	10	1	ACCESSION:AJ598409

ALIGNMENTS

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RESULT 1
AJ587934
LOCUS
DEFINITION
  Arabidopsis thaliana T-DNA flanking sequence, left border, clone
  342D03, genomic survey sequence.
ACCESSION
  AJ587934
VERSION
  AJ587934.1 GI:37937558
KEYWORDS
  GSS; left border; T-DNA flanking sequence.
SOURCE
  Arabidopsis thaliana (thale cress)
ORGANISM
  Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
  Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
  rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE
  1
  Brunaud, V., Balzerque, S., Dubreucq, B., Aubourg, S., Samson, F.,
  Chauvin, S., Bechtold, N., Cruaud, C., DeRose, R., Pelletier, G.,
  Lepiniec, L., Caboche, M. and Lecharny, A.
  T-DNA integration into the Arabidopsis genome depends on sequences
  of pre-insertion sites
  EMBO Rep. 3 (12), 1152-1157 (2002)
  12446565
  2 (bases 1 to 12)
  Balzerque, S.
  Direct Submission
  Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue
  Gaston Cremieux, 91057 Evry cedex, FRANCE
  PCR was performed on DNA from transformants of Arabidopsis thaliana
  plants from INRA (Versailles). The DNA fragment(s) resulting from
  the PCR were directly sequenced from the left or the right border
  to determine the genomic sequence flanking the insertion. T-DNA
  derived sequences were removed. Information to order the
  corresponding mutant line and a link to a database providing a
  graphical display of the insertion site are available at
  http://dbgap.versailles.inra.fr/publiclines/. This sequence has
  been generated in the framework of the French plant genomics
  program 'Genoplante' (http://www.genoplante.com and
  http://genoplante-info.infobiogen.fr).
  Location/Qualifiers
  1..10
  /organism="Arabidopsis thaliana"
  
```

COMMENT
Gaston Cremieux, 91057 Evry cedex, FRANCE
PCR was performed on DNA from transformants of Arabidopsis thaliana
plants from INRA (Versailles). The DNA fragment(s) resulting from
the PCR were directly sequenced from the left or the right border
to determine the genomic sequence flanking the insertion. T-DNA
derived sequences were removed. Information to order the
corresponding mutant line and a link to a database providing a
graphical display of the insertion site are available at
http://dbgap.versailles.inra.fr/publiclines/. This sequence has
been generated in the framework of the French plant genomics
program 'Genoplante' (http://www.genoplante.com and
http://genoplante-info.infobiogen.fr).
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:3702"
/clone="342D03"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
/ecotype="Wassilewskija"
misc_feature
1..12
/note="T-DNA flanking sequence
left border"

FEATURES
source

misc_feature

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 0.46;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 CGCGCGGCGG 10

Db 2 CGCGCGGCGG 11

RESULT 2

AJ592517

LOCUS

DEFINITION

Arabidopsis thaliana T-DNA flanking sequence, right border, clone

621G09, genomic survey sequence.

ACCESSION

AJ592517

VERSION

AJ592517.1 GI:37942141

KEYWORDS

GSS; right border; T-DNA flanking sequence.

SOURCE

Arabidopsis thaliana (thale cress)

ORGANISM

Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;

rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE

1

Brunaud, V., Balzerque, S., Dubreucq, B., Aubourg, S., Samson, F.,

Chauvin, S., Bechtold, N., Cruaud, C., DeRose, R., Pelletier, G.,

Lepiniec, L., Caboche, M. and Lecharny, A.

T-DNA integration into the Arabidopsis genome depends on sequences

of pre-insertion sites

EMBO Rep. 3 (12), 1152-1157 (2002)

12446565

2 (bases 1 to 10)

Balzerque, S.

Direct Submission

Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue

Gaston Cremieux, 91057 Evry cedex, FRANCE

PCR was performed on DNA from transformants of Arabidopsis thaliana

plants from INRA (Versailles). The DNA fragment(s) resulting from

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misc_feature
1. .10
/note="T-DNA flanking sequence
right border"

Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      5 GGGCGGC 11
Db      1 GGGCGGC 7

RESULT 3
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LOCUS      AJ598409              10 bp      DNA      linear      GSS 15-JAN-2004
DEFINITION Arabidopsis thaliana T-DNA flanking sequence, right border, clone
467H07, genomic survey sequence.
ACCESSION      AJ598409
VERSION      AJ598409.1 GI:37948037
KEYWORDS      GSS; right border; T-DNA flanking sequence.
SOURCE      Arabidopsis thaliana (thale cress)
ORGANISM      Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
1
REFERENCE
AUTHORS      Brunaud,V., Balzergue,S., Dubreucq,B., Aubourg,S., Samson,F.,
Chauvin,S., Rechtold,N., Cruaud,C., DeRose,R., Pelletier,G.,
Lepiniec,L., Caboche,M. and Lecharny,A.
TITLE      T-DNA integration into the Arabidopsis genome depends on sequences
of pre-insertion sites
JOURNAL      EMBO Rep. 3 (12), 1152-1157 (2002)
PUBMED      12446565
REFERENCE
AUTHORS      Balzergue,S.
TITLE      Direct Submission
JOURNAL      Submitted (23-OCT-2003) Balzergue S., UMRGV, INRA/CNRS, 2 rue
Gaston Cremieux, 91057 Evry cedex, FRANCE
COMMENT      PCR was performed on DNA from transformants of Arabidopsis thaliana
plants from INRA (Versailles). The DNA fragment(s) resulting from
the PCR were directly sequenced from the left or the right border
to determine the genomic sequence flanking the insertion. T-DNA
derived sequences were removed. Information to order the
corresponding mutant line and a link to a database providing a
graphical display of the insertion site are available at
http://dbsgap.versailles.inra.fr/publiclines/. This sequence has
been generated in the framework of the French plant genomics
program 'Genoplante' (http://www.genoplante.com and
http://genoplante-info.infobiogen.fr).

FEATURES
source
1. .10
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/db_xref="taxon:3702"
/clone="467H07"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
/ecotype="Wassilewskija"
1. .10
/notes="T-DNA flanking sequence
right border"

misc_feature
1. .10

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Search completed: May 9, 2006, 16:40:51
Job time : 0.001 secs
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GenCore version 5.1.8
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OM nucleic - nucleic search, using sw model

Run on: May 9, 2006, 16:42:25 ; Search time 0.001 Seconds
(without alignments)
70.304 Million cell updates/sec

Title: US-09-904-968A-20-COPY
Perfect score: 16
Sequence: 1 cggcggcgccatcgt 16

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 201 seqs, 2197 residues

Total number of hits satisfying chosen parameters: 402

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 201 summaries

Database : ge20.2*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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3	12.4	77.5	14	1	AR349583
4	11.4	71.2	15	1	I72535
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6	10.8	67.5	15	1	AR022232
7	10.8	67.5	15	1	AR034499
8	10.8	67.5	15	1	AR034500
9	10.8	67.5	15	1	AR048599
10	10.8	67.5	15	1	AR048600
11	10.8	67.5	15	1	I43403
12	10.8	67.5	15	1	I43404
13	10.8	67.5	15	1	AR610551
14	10.8	67.5	15	1	AR610572
15	10.4	65.0	12	1	AR610575
16	10.4	65.0	12	1	AX528621
17	10.4	65.0	13	1	AR610553
18	10.4	65.0	13	1	AR610574
19	10.4	65.0	14	1	AR610530
20	10.4	65.0	14	1	AR610552
21	9.8	61.2	13	1	AR610594
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AUTHORS	Nyce,J.W		
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TITLE	Morishita,H., Kanamori,T. and Nobuhara,M.		
JOURNAL	Isolated DNA encoding novel protease inhibitory polypeptide		
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AUTHORS        Dzau, V.J.
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ORGANISM   Unclassified.
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AUTHORS    Dzau, V.J.
TITLE      Inhibition of proliferation of vascular smooth muscle cell
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REFERENCE  1 (bases 1 to 15)
AUTHORS    Dzau, V.J. and Kaneda, Y.
TITLE      Method for producing in vivo delivery of therapeutic agents via
JOURNAL    liposomes
FEATURES   Patent: US 5631237-A 8 20-MAY-1997;
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AUTHORS        Dzau, V.J.
TITLE          Inhibition of proliferation of vascular smooth muscle cell
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ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 15)
AUTHORS    Dzau, V.J.
TITLE      Inhibition of proliferation of vascular smooth muscle cell
JOURNAL    Patent: US 5821234-A 2 13-OCT-1998;
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ORGANISM      Unknown.
REFERENCE      Unclassified.
AUTHORS        1 (bases 1 to 15)
TITLE          Dzaou.V.J. and Kaneda.Y.
METHOD        Method for producing in vivo delivery of therapeutic agents via
LIPIDOMES      liposomes
JOURNAL        Patent: US 5631237-A 9 20-MAY-1997;
FEATURES       Location/Qualifiers
               1..15
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match    67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 22;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2  GGCGGGCGGCATCG 15
        || |||||
Db      15  GGAGGGCGGCATCG 2

RESULT 13
AR610551
LOCUS      AR610551
DEFINITION Sequence 673 from patent US 6825174.
ACCESSION AR610551
VERSION    AR610551.1 GI:56666027
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 15)
AUTHORS    Nyce,J.W.
TITLE      Composition, formulations & method for prevention & treatment of
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL    Patent: US 6825174-A 673 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES   Location/Qualifiers
           1..15
           /organism="unknown"
           /mol_type="genomic DNA"

Query Match    67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 22;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2  GGCGGGCGGCATCG 15
        || |||||
Db      15  GGAGGGCGGCATCG 2

RESULT 14
AR610572
LOCUS      AR610572
DEFINITION Sequence 694 from patent US 6825174.
ACCESSION AR610572
VERSION    AR610572.1 GI:56666048
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 15)
AUTHORS    Nyce,J.W.
TITLE      Composition, formulations & method for prevention & treatment of
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL    Patent: US 6825174-A 694 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES   Location/Qualifiers
           1..15
           /organism="unknown"
           /mol_type="genomic DNA"

ORGANISM      Unknown.
REFERENCE      Unclassified.
AUTHORS        1 (bases 1 to 15)
TITLE          Dzaou.V.J. and Kaneda.Y.
METHOD        Method for producing in vivo delivery of therapeutic agents via
LIPIDOMES      liposomes
JOURNAL        Patent: US 5631237-A 9 20-MAY-1997;
FEATURES       Location/Qualifiers
               1..15
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match    67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 22;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2  GGCGGGCGGCATCG 15
        || |||||
Db      15  GGAGGGCGGCATCG 2

RESULT 13
AR610551
LOCUS      AR610551
DEFINITION Sequence 673 from patent US 6825174.
ACCESSION AR610551
VERSION    AR610551.1 GI:56666027
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 15)
AUTHORS    Nyce,J.W.
TITLE      Composition, formulations & method for prevention & treatment of
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL    Patent: US 6825174-A 673 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES   Location/Qualifiers
           1..15
           /organism="unknown"
           /mol_type="genomic DNA"

Query Match    67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 22;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2  GGCGGGCGGCATCG 15
        || |||||
Db      15  GGAGGGCGGCATCG 2

RESULT 14
AR610572
LOCUS      AR610572
DEFINITION Sequence 694 from patent US 6825174.
ACCESSION AR610572
VERSION    AR610572.1 GI:56666048
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 15)
AUTHORS    Nyce,J.W.
TITLE      Composition, formulations & method for prevention & treatment of
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL    Patent: US 6825174-A 694 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES   Location/Qualifiers
           1..15
           /organism="unknown"
           /mol_type="genomic DNA"

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Query Match    67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 22;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2  GGCGGGCGGCATCG 15
        || |||||
Db      1  GGAGGGCGGCATCG 14

RESULT 15
AR610575
LOCUS      AR610575
DEFINITION Sequence 697 from patent US 6825174.
ACCESSION AR610575
VERSION    AR610575.1 GI:56666051
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 12)
AUTHORS    Nyce,J.W.
TITLE      Composition, formulations & method for prevention & treatment of
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL    Patent: US 6825174-A 697 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES   Location/Qualifiers
           1..12
           /organism="unknown"
           /mol_type="genomic DNA"

Query Match    65.0%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 20;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2  GGCGGGCGGCAT 13
        || |||||
Db      1  GGAGGGCGGCAT 12

RESULT 16
AX528621/c
LOCUS      AX528621/c
DEFINITION Sequence 107 from Patent W002055098.
ACCESSION  AX528621
VERSION     AX528621.1 GI:25172710
KEYWORDS    .
SOURCE      synthetic construct
           other sequences; artificial sequences.
ORGANISM    .
REFERENCE    1
AUTHORS      Chernajovsky,Y., Dreja,H.S. and Adams,G.
TITLE        Latency associated peptide for providing latency to
           pharmaceutically active proteins
JOURNAL      Patent: WO 02055098-A 107 18-JUL-2002;
           QUEEN MARY & WESTFIELD COLLEGE (GB)
FEATURES     Location/Qualifiers
           1..12
           /organism="synthetic construct"
           /mol_type="unassigned DNA"
           /db_xref="taxon:32630"
           /note="LAP-huIFNbeta construct"

Query Match    65.0%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 20;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2  GGCGGGCGGCAT 13
        || |||||
Db      12  GGAGGGCGGCAT 1

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RESULT 17
AR610553
LOCUS AR610553 13 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 675 from patent US 6825174.
ACCESSION AR610553
VERSION AR610553.1 GI:56666029
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 13)
/organism="unknown"
/mol_type="genomic DNA"
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation
JOURNAL Patent: US 6825174-A 675 30-NOV-2004;
East Carolina University; Greenville, NC
FEATURES
1..13
Location/Qualifiers
source
Query Match 65.0%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 23;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCAT 13
|| |||||
Db 2 GGAGGGCGGCAT 13

RESULT 18
AR610574
LOCUS AR610574 13 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 696 from patent US 6825174.
ACCESSION AR610574
VERSION AR610574.1 GI:56666050
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 13)
/organism="unknown"
/mol_type="genomic DNA"
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation
JOURNAL Patent: US 6825174-A 696 30-NOV-2004;
East Carolina University; Greenville, NC
FEATURES
1..13
Location/Qualifiers
source
Query Match 65.0%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 23;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCAT 13
|| |||||
Db 2 GGAGGGCGGCAT 13

RESULT 19
AR610530
LOCUS AR610530 14 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 652 from patent US 6825174.
ACCESSION AR610530
VERSION AR610530.1 GI:56666006
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 14)
/organism="unknown"
/mol_type="genomic DNA"
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation
JOURNAL Patent: US 6825174-A 715 30-NOV-2004;
East Carolina University; Greenville, NC
FEATURES
1..14
Location/Qualifiers
source
Query Match 65.0%; Score 10.4; DB 1; Length 14;
Best Local Similarity 91.7%; Pred. No. 25;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCAT 13
|| |||||
Db 1 GGAGGGCGGCAT 12

RESULT 20
AR610552
LOCUS AR610552 14 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 674 from patent US 6825174.
ACCESSION AR610552
VERSION AR610552.1 GI:56666028
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 14)
/organism="unknown"
/mol_type="genomic DNA"
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation
JOURNAL Patent: US 6825174-A 674 30-NOV-2004;
East Carolina University; Greenville, NC
FEATURES
1..14
Location/Qualifiers
source
Query Match 65.0%; Score 10.4; DB 1; Length 14;
Best Local Similarity 91.7%; Pred. No. 25;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCAT 13
|| |||||
Db 3 GGAGGGCGGCAT 14

RESULT 21
AR610594
LOCUS AR610594 13 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 716 from patent US 6825174.
ACCESSION AR610594
VERSION AR610594.1 GI:56666070
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 13)
/organism="unknown"
/mol_type="genomic DNA"
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation
JOURNAL Patent: US 6825174-A 716 30-NOV-2004;
East Carolina University; Greenville, NC
FEATURES
1..13
Location/Qualifiers
source
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Query Match      61.2%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 31;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  3 GCGGGCGGCATCG 15
    |||||
Db   1 GAGGGCGGCATGG 13

RESULT 22
BD209384/c
LOCUS      14 bp      RNA      linear      PAT 17-JUL-2003
DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related
            to hepatitis C virus infection.
ACCESSION  BD209384
VERSION     JP 2002512791-A/2974.
KEYWORDS   JP 2002512791-A/2974.
SOURCE     unidentified
ORGANISM   unclassified.
REFERENCE  1 (bases 1 to 14)
AUTHORS    Blatt, L., McSwiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
TITLE      Enzymatic nucleic acid treatment of diseases or conditions related
            to hepatitis C virus infection
JOURNAL    Patent: JP 2002512791-A 2974 08-MAY-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT    PN JP 2002512791-A/2974
            PD 08-MAY-2002
            PF 26-APR-1999 JP 2000545991
            PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
            25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
            LAWRENCE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI
            PAVCO.
            PI DENNIS MACEJAK
            PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
            A61K37/66,
            PC C12N15/00
            CC Enzymatic nucleic acid treatment of diseases or conditions CC
            related to
            CC hepatitis C virus infection.
            FH Key Location/Qualifiers
            FT source 1..14
            FT /organism='Hepatitis virus (hepatitis C FT
            virus)',
            FT Location/Qualifiers
FEATURES
source
1..14
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"

Query Match      61.3%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 35;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  1 CGGGCGGGCGGCAT 13
    |||||
Db   13 CGGGAGCTGCAT 1.

RESULT 23
I08913/c
LOCUS      14 bp      DNA      linear      PAT 02-DEC-1994
DEFINITION Sequence 33 from Patent WO 880706.
ACCESSION  I08913
VERSION     I08913.1 GI:588386
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 14)
AUTHORS    Maugh, K.J., Anderson, D.M., Strausberg, S.L., Strausberg, R. and
            Wei, T.

Query Match      61.2%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 35;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  3 GCGGGCGGCATCG 15
    |||||
Db   1 GAGGGCGGCATGG 13

RESULT 24
AR610593
LOCUS      14 bp      DNA      linear      PAT 15-DEC-2004
DEFINITION Sequence 715 from patent US 6825174.
ACCESSION  AR610593
VERSION     AR610593.1 GI:56666069
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 14)
AUTHORS    Nyce, J.W.
TITLE      Composition, formulations & method for prevention & treatment of
            diseases and conditions associated with bronchoconstriction,
            allergy(ies) & inflammation
JOURNAL    Patent: US 6825174-A 715 30-NOV-2004;
            East Carolina University; Greenville, NC
FEATURES
source
1..14
/organism="unknown"
/mol_type="genomic DNA"

Query Match      61.2%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 35;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  3 GCGGGCGGCATCG 15
    |||||
Db   1 GAGGGCGGCATGG 13

RESULT 25
AR610576
LOCUS      11 bp      DNA      linear      PAT 15-DEC-2004
DEFINITION Sequence 698 from patent US 6825174.
ACCESSION  AR610576
VERSION     AR610576.1 GI:56666052
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 11)
AUTHORS    Nyce, J.W.
TITLE      Composition, formulations & method for prevention & treatment of
            diseases and conditions associated with bronchoconstriction,
            allergy(ies) & inflammation
JOURNAL    Patent: US 6825174-A 698 30-NOV-2004;
            East Carolina University; Greenville, NC
FEATURES
source
1..11
/organism="unknown"
/mol_type="genomic DNA"

Query Match      58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      2 GCGCGCGCGCA 12
Db      || |||||
        1 GCGCGCGCGCA 11

RESULT 26
LOCUS   AR610596
DEFINITION Sequence 718 from patent US 6825174.
ACCESSION AR610596
VERSION   AR610596.1 GI:56666072
KEYWORDS
SOURCE   Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 11)
AUTHORS  Nyce,J.W.
TITLE     Composition, formulations & method for prevention & treatment of
          diseases and conditions associated with bronchoconstriction,
          allergy(ies) & inflammation
JOURNAL  Patent: US 6825174-A 718 30-NOV-2004;
          East Carolina University; Greenville, NC
FEATURES
          Location/Qualifiers
          source
            1..11
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGCGCGCGCAT 13
Db      || |||||
        1 GAGCGCGCGCAT 11

RESULT 27
LOCUS   AR610633
DEFINITION Sequence 755 from patent US 6825174.
ACCESSION AR610633
VERSION   AR610633.1 GI:566666109
KEYWORDS
SOURCE   Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 11)
AUTHORS  Nyce,J.W.
TITLE     Composition, formulations & method for prevention & treatment of
          diseases and conditions associated with bronchoconstriction,
          allergy(ies) & inflammation
JOURNAL  Patent: US 6825174-A 755 30-NOV-2004;
          East Carolina University; Greenville, NC
FEATURES
          Location/Qualifiers
          source
            1..11
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      5 GCGCGCGCGCATCG 15
Db      || |||||
        1 GCGCGCGCGCATGG 11

RESULT 28
LOCUS   A71448
DEFINITION Sequence 7 from Patent WO9813521.
ACCESSION A71448

Query Match      58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      5 GCGCGCGCGCATCG 15
Db      || |||||
        1 GCGCGCGCGCATGG 11

RESULT 29
LOCUS   CQ766479
DEFINITION Sequence 440 from Patent WO2004005547.
ACCESSION CQ766479
VERSION   CQ766479.1 GI:44908739
KEYWORDS
SOURCE   synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS  Weinzierl,R.
TITLE     Method
JOURNAL  Patent: WO 2004005547-A 440 15-JAN-2004;
          IMPERIAL COLLEGE INNOVATIONS LIMITED (GB)
FEATURES
          Location/Qualifiers
          source
            1..12
              /organism="synthetic construct"
              /mol_type="unassigned DNA"
              /db_xref="taxon:32630"
              /note="HS motif"

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 35;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CGCGCGCGCGGC 11
Db      || |||||
        1 CGCGCGCGCGGC 11

RESULT 30
LOCUS   I14717/c
DEFINITION Sequence 68 from patent US 5451659.
ACCESSION I14717
VERSION   I14717.1 GI:997200
KEYWORDS
SOURCE   Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS  Morishita,H., Kanamori,T. and Nobuhara,M.
TITLE     Polypeptide, DNA fragment encoding the same, drug composition
          containing the same and process for producing the same
JOURNAL  Patent: US 5451659-A 68 19-SEP-1995;
          Location/Qualifiers
          source
            1..12
              /organism="unclassified"
              /mol_type="unassigned DNA"
              /db_xref="taxon:32644"

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 35;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CGCGCGCGCGGC 11
Db      || |||||
        1 CGCGCGCGCGGC 11

RESULT 31
LOCUS   I14717
DEFINITION Sequence 68 from patent US 5451659.
ACCESSION I14717
VERSION   I14717.1 GI:997200
KEYWORDS
SOURCE   Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS  Morishita,H., Kanamori,T. and Nobuhara,M.
TITLE     Polypeptide, DNA fragment encoding the same, drug composition
          containing the same and process for producing the same
JOURNAL  Patent: US 5451659-A 68 19-SEP-1995;
          Location/Qualifiers
          source
            1..12
              /organism="unclassified"
              /mol_type="unassigned DNA"
              /db_xref="taxon:32644"

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source      1. .12
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 35;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      6 GCGGGCATCGT 16
        ||||| |||
Db      12 GCGGGCATCGT 2

RESULT 31
LOCUS      I32804
DEFINITION Sequence 68 from patent US 5589360.
ACCESSION  I32804
VERSION     I32804.1 GI:1823595
KEYWORDS   .
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 12)
AUTHORS     Morishita,H., Kanamori,T. and Nobuhara,M.
TITLE       Polypeptide, DNA fragment encoding the same, drug composition
            containing the same and process for producing the same
JOURNAL     Patent: US 5589360-A 68 31-DEC-1996;
FEATURES    Location/Qualifiers
            source
            1. .12
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 35;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      6 GCGGGCATCGT 16
        ||||| |||
Db      12 GCGGGCATCGT 2

RESULT 32
LOCUS      I70516/c
DEFINITION Sequence 68 from patent US 5679770.
ACCESSION  I70516
VERSION     I70516.1 GI:3006651
KEYWORDS   .
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 12)
AUTHORS     Morishita,H., Kanamori,T. and Nobuhara,M.
TITLE       Polypeptide, DNA fragment encoding the same, drug composition
            containing the same and process for producing the same
JOURNAL     Patent: US 5679770-A 68 21-OCT-1997;
FEATURES    Location/Qualifiers
            source
            1. .12
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 35;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      6 GCGGGCATCGT 16
        ||||| |||
Db      12 GCGGGCATCGT 2

RESULT 33
LOCUS      AR610554
DEFINITION Sequence 676 from patent US 6825174.
ACCESSION  AR610554
VERSION     AR610554.1 GI:56666030
KEYWORDS   .
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 12)
AUTHORS     Nyce,J.W.
TITLE       Composition, formulations & method for prevention & treatment of
            diseases and conditions associated with bronchoconstriction,
            allergy(ies) & inflammation
JOURNAL     Patent: US 6825174-A 676 30-NOV-2004;
            East Carolina University; Greenville, NC
FEATURES    Location/Qualifiers
            source
            1. .12
            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 35;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2 GCGGGCGGCA 12
        || |||||
Db      2 GCGGGCGGCA 12

RESULT 34
LOCUS      AR610595
DEFINITION Sequence 717 from patent US 6825174.
ACCESSION  AR610595
VERSION     AR610595.1 GI:56666071
KEYWORDS   .
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 12)
AUTHORS     Nyce,J.W.
TITLE       Composition, formulations & method for prevention & treatment of
            diseases and conditions associated with bronchoconstriction,
            allergy(ies) & inflammation
JOURNAL     Patent: US 6825174-A 717 30-NOV-2004;
            East Carolina University; Greenville, NC
FEATURES    Location/Qualifiers
            source
            1. .12
            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 35;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGCA 13
        || |||||
Db      1 GAGGGCGGCA 11

RESULT 35
LOCUS      AR610614
DEFINITION Sequence 736 from patent US 6825174.
ACCESSION  AR610614
VERSION     AR610614.1 GI:56666090
KEYWORDS   .
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 12)
AUTHORS     Nyce,J.W.
TITLE       Composition, formulations & method for prevention & treatment of

```

diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation

JOURNAL Patent: US 6825174-A 736 30-NOV-2004;
East Carolina University; Greenville, NC

FEATURES
source

1. .12
Location/Qualifiers
/organism="unknown"
/mol_type="genomic DNA"

Query Match 58.7%; Score 9.4; DB 1; Length 12;

Best Local Similarity 90.9%; Pred. No. 35;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
|||||
Db 2 GGGCGGCATGG 12

RESULT 36

LOCUS AR610632 12 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 754 from patent US 6825174.

ACCESSION AR610632
VERSION AR610632.1 GI:56666108

KEYWORDS
SOURCE

Unknown.

ORGANISM

Unclassified.

REFERENCE 1 (bases 1 to 12)

Nyce,J.W.

Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,

allergy(ies) & inflammation

JOURNAL Patent: US 6825174-A 754 30-NOV-2004;
East Carolina University; Greenville, NC

FEATURES
source

1. .12
Location/Qualifiers
/organism="unknown"
/mol_type="genomic DNA"

Query Match

Best Local Similarity 58.7%; Score 9.4; DB 1; Length 12;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
|||||
Db 1 GGGCGGCATGG 11

RESULT 37

LOCUS AR610531 13 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 653 from patent US 6825174.

ACCESSION AR610531
VERSION AR610531.1 GI:56666007

KEYWORDS
SOURCE

Unknown.

ORGANISM

Unclassified.

REFERENCE 1 (bases 1 to 13)

Nyce,J.W.

Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,

allergy(ies) & inflammation

JOURNAL Patent: US 6825174-A 653 30-NOV-2004;
East Carolina University; Greenville, NC

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source

1. .13
Location/Qualifiers
/organism="unknown"
/mol_type="genomic DNA"

Query Match

Best Local Similarity 58.7%; Score 9.4; DB 1; Length 13;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGGCGGCATCG 12

|||||

Db 3 GGGCGGCATCG 13

RESULT 38

LOCUS AR610613

DEFINITION

Sequence 735 from patent US 6825174.

ACCESSION AR610613

VERSION AR610613.1 GI:56666089

KEYWORDS

SOURCE

Unknown.

ORGANISM

Unclassified.

REFERENCE 1 (bases 1 to 13)

Nyce,J.W.

Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,

allergy(ies) & inflammation

JOURNAL Patent: US 6825174-A 735 30-NOV-2004;
East Carolina University; Greenville, NC

FEATURES

source

1. .13
Location/Qualifiers
/organism="unknown"

/mol_type="genomic DNA"

Query Match

Best Local Similarity 58.7%; Score 9.4; DB 1; Length 13;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15

|||||

Db 2 GGGCGGCATGG 12

RESULT 39

LOCUS AR610631

DEFINITION

Sequence 753 from patent US 6825174.

ACCESSION AR610631

VERSION AR610631.1 GI:56666107

KEYWORDS

SOURCE

Unknown.

ORGANISM

Unclassified.

REFERENCE 1 (bases 1 to 13)

Nyce,J.W.

Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,

allergy(ies) & inflammation

JOURNAL Patent: US 6825174-A 753 30-NOV-2004;
East Carolina University; Greenville, NC

FEATURES

source

1. .13
Location/Qualifiers
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/mol_type="genomic DNA"

Query Match

Best Local Similarity 58.7%; Score 9.4; DB 1; Length 13;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15

|||||

Db 1 GGGCGGCATGG 11

RESULT 40

LOCUS AR610616

DEFINITION

Sequence 738 from patent US 6825174.

AR610616

linear

PAT 15-DEC-2004


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ACCESSION AR610615
VERSION AR610615.1 GI:56666091
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 11)
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation
JOURNAL Patent: US 6825174-A 737 30-NOV-2004;
East Carolina University; Greenville, NC
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source
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/organism="unknown"
/mol_type="genomic DNA"
Query Match 56.2%; Score 9; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 38;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 5 GCGCGGCAT 13
|||||
Db 2 GCGCGGCAT 10
|||||
RESULT 45
LOCUS CQ972127 12 bp DNA linear PAT 05-JAN-2005
DEFINITION Sequence 8 from Patent EP1491637.
ACCESSION CQ972127
VERSION CQ972127.1 GI:57163411
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Koizumi,T., Hamano,Y. and Yamamoto,S.
TITLE Process for improving efficiency of DNA amplification reactions
JOURNAL Patent: EP 1491637-A 8 29-DEC-2004;
Nichirei Corporation (JP)
FEATURES
source
1..12
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Description of Artificial Sequence: primer"
Query Match 56.2%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 43;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GCGCGGCGG 10
|||||
Db 2 GCGCGGCGG 10
|||||
RESULT 46
LOCUS AR106668/c 12 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 27 from patent US 6107076.
ACCESSION AR106668
VERSION AR106668.1 GI:12821198
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS Tang,W.-J. and Gilman,A.G.
TITLE Soluble mammalian adenylyl cyclase and uses therefor
JOURNAL Patent: US 6107076-A 27 22-AUG-2000;
FEATURES
Location/Qualifiers
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source
1..12
/organism="unknown"
/mol_type="unassigned DNA"
Query Match 55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 48;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3 GCGCGCGGCATC 14
|||||
Db 12 GCTGGAGGCATC 1
|||||
RESULT 47
LOCUS I14742 12 bp DNA linear PAT 02-APR-1996
DEFINITION Sequence 7 from patent US 5453355.
ACCESSION I14742
VERSION I14742.1 GI:1249651
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 12)
AUTHORS Birkenmeyer,L.G., Ching,S., Ohbaishi,Y. and Winkler,J.K.
TITLE Oligonucleotides and methods for the detection of Neisseria
gonorrhoeae
JOURNAL Patent: US 5453355-A 7 26-SEP-1995;
FEATURES
source
1..12
/organism="unknown"
/mol_type="unassigned DNA"
Query Match 55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 48;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 5 GCGCGGCATCGT 16
|||||
Db 12 GCGCGGCGTCTG 1
|||||
RESULT 48
LOCUS AX100302/c 12 bp RNA linear PAT 10-APR-2001
DEFINITION Sequence 15 from Patent WO0121789.
ACCESSION AX100302
VERSION AX100302.1 GI:13619329
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Grassi,G., Kuhn,A.C. and Kandolf,R.
TITLE Ribozymes used for restenosis prevention
JOURNAL Patent: WO 0121789-A 15 29-MAR-2001;
Eberhard-Karls-Universitaet Tuebingen; (DE)
FEATURES
source
1..12
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="5 -Bindungsarm fur Ribozym gegen E2F1"
Query Match 55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 48;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2 GCGCGGCGGCAT 13
|||||
Db 12 GCGCGGCGGCTT 1
|||||
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RESULT 49
LOCUS       AR035573
DEFINITION   Sequence 7 from patent US 5871919.
ACCESSION   AR035573
VERSION     AR035573.1 GI:5952241
KEYWORDS    Unknown.
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Brant,S.R.; Yun,C.Chris., Donowitz,M. and Tse,C.-M.
TITLE       Method of identifying agents that affect human NHE3
JOURNAL     Patent: US 5871919-A 7 16-FEB-1999;
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 46;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGCA 12
Db      1 GCAGGCGGCA 10

RESULT 50
LOCUS       CQ944896
DEFINITION   Sequence 43 from Patent WO2004099445.
ACCESSION   CQ944896
VERSION     CQ944896.1 GI:56294237
KEYWORDS    synthetic construct
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Kahl,G., Winter,P., Krueger,D., Reich,S., Matsumura,H. and
            Terauchi,R.
TITLE       Use of a type iii restriction enzyme to isolate identification tags
            comprising more than 25 nucleotides
JOURNAL     Patent: WO 2004099445-A 43 18-NOV-2004;
            Iwate Prefectural Government (JP)
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="Description of Artificial Sequence:Synthetic DNA
            (Tag Sequence)"

Query Match      52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 46;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGCA 12
Db      1 GCGGGCGGCA 10

RESULT 51
LOCUS       CQ986662/c
DEFINITION   Sequence 206 from Patent WO2005001142.
ACCESSION   CQ986662
VERSION     CQ986662.1 GI:58194579
KEYWORDS    Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;

Hominidae; Homo.
REFERENCE   1
AUTHORS     Lofton-Day,C., Sledziewski,A., Thomas,J., Day,R.W.,
            Tonnes-Priddy,L. and Cardon,K.
TITLE       Methods and nucleic acids for the analysis of colorectal cell
            proliferative disorders
JOURNAL     Patent: WO 2005001142-A 206 06-JAN-2005;
            Epigenomics AG (DE)
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="Homo sapiens"
            /mol_type="unassigned DNA"
            /db_xref="taxon:9606"

Query Match      52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 46;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      4 CCGGCGGCAT 13
Db      10 CCGGCGGCAT 1

RESULT 52
LOCUS       CS114180/c
DEFINITION   Sequence 938 from Patent WO2005054517.
ACCESSION   CS114180
VERSION     CS114180.1 GI:68225725
KEYWORDS    synthetic construct
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Day,K.J., Cottrell,S., Disler,J., Morotti,A., Yamamura,S.,
            Dekker,S., Ocamp,Y. and Devos,T.
TITLE       Methods and nucleic acids for the analysis of gene expression
            associated with the development of prostate cell proliferative
            disorders
JOURNAL     Patent: WO 2005054517-A 938 16-JUN-2005;
            Epigenomics AG (DE)
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="chemically treated genomic DNA (Homo sapiens)"

Query Match      52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 46;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      4 CCGGCGGCAT 13
Db      10 CCGGCGGCAT 1

RESULT 53
LOCUS       AR610577
DEFINITION   Sequence 699 from patent US 6825174.
ACCESSION   AR610577
VERSION     AR610577.1 GI:56666053
KEYWORDS    Unknown.
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Nyce,J.W.
TITLE       Composition, formulations & method for prevention & treatment of
            diseases and conditions associated with bronchoconstriction,
            allergy(ies) & inflammation
JOURNAL     Patent: US 6825174-A 699 30-NOV-2004;

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[illegible]


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VERSION      A12950.1  GI:489565
KEYWORDS     .
SOURCE       unidentified
ORGANISM     unidentified
REFERENCE    1 (bases 1 to 11)
AUTHORS      Bartoloni,A., Pizza,M. and Rappuoli,R.
TITLE        A protective immunodominant epitope included in the S1 subunit of
              pertussis toxin
JOURNAL      Patent: EP 0320866-A 7 21-JUN-1989;
              SCLAVO S.p.A
FEATURES     .
source       Location/Qualifiers
              1..11
              /organism="unidentified"
              /mol_type="unassigned DNA"
              /db_xref="taxon:32644"

Query Match      52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 7 GCGGCTTCGT 16
    |||||
Db 11 GCGGCTTCGT 2

RESULT 59
A13329/c
LOCUS      A13329      11 bp      DNA      linear      PAT 18-JAN-1994
DEFINITION Modified DNA for pertussis toxin (S1, AA 910-920).
ACCESSION  A13329
VERSION     A13329.1  GI:489614
KEYWORDS    .
SOURCE      synthetic construct
            synthetic construct
            other sequences; artificial sequences.
REFERENCE   1 (bases 1 to 11)
AUTHORS     Pizza,M.; Rappuoli,R. and Bartoloni,A.
TITLE       Bordetella pertussis toxin with altered toxicity
JOURNAL     Patent: EP 0322533-A 9 05-JUL-1989;
            SCLAVO S.p.A
FEATURES     .
source       Location/Qualifiers
              1..11
              /organism="synthetic construct"
              /mol_type="unassigned DNA"
              /db_xref="taxon:32630"

Query Match      52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 7 GCGGCATCGT 16
    |||||
Db 11 GCGGCTTCGT 2

RESULT 60
BD087712/c
LOCUS      BD087712      11 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION WNT-1 induction gene.
ACCESSION  BD087712
VERSION     BD087712.1  GI:22633322
KEYWORDS    JP 2001520885-A/22.
SOURCE      synthetic construct
            synthetic construct
            other sequences; artificial sequences.
REFERENCE   1 (bases 1 to 11)
AUTHORS     Levine,A.J. and Pennica,D.
TITLE       WNT-1 induction gene
JOURNAL     Patent: JP 2001520885-A 22 06-NOV-2001;
            GENENTECH INC
COMMENT     OS Artificial Sequence
            PN JP 2001520885-A/22

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PD 06-NOV-2001
PF 29-OCT-1998 JP 2000518091
PR 29-OCT-1997 US 60/063704,04-FEB-1998 US 60/073612 PI
ARNOLD J LEVINE,DIANE PENNICA
PC C12N15/09,C07K14/47,C07K16/18,C07K19/00,C12N1/15,C12N1/19, PC
C12N1/21,
PC C12N5/00,C12P21/02,C12P21/08// (C12N15/09,C12R1:91),C12N15/00,
C12N5/00,
PC (C12N15/00,C12R1:91)
CC Sequence is synthesized
FH Key Location/Qualifiers
FT source 1..11
   /organism='Artificial Sequence'.
   Location/Qualifiers
   1..11
   /organism="synthetic construct"
   /mol_type="genomic DNA"
   /db_xref="taxon:32630"

Query Match      52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CGCGCGCGCG 10
    |||||
Db 11 CGGAGGCGCG 2

RESULT 61
CQ836946/c
LOCUS      CQ836946      11 bp      DNA      linear      PAT 29-JUL-2004
DEFINITION Sequence 2004 from Patent WO2004059001.
ACCESSION  CQ836946
VERSION     CQ836946.1  GI:50836480
KEYWORDS    .
SOURCE      Homo sapiens (human)
            Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominidae; Homo.
REFERENCE   1
AUTHORS     Petersohn,D., Schlotmann,K., Gassenmeier,T., Holtkoetter,O.,
            Conradt,M. and Hofmann,K.
TITLE       Method for determining markers of human facial skin
JOURNAL     Patent: WO 2004059001-A 2004 15-JUL-2004;
            Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES     .
source       Location/Qualifiers
              1..11
              /organism="Homo sapiens"
              /mol_type="unassigned DNA"
              /db_xref="taxon:9606"

Query Match      52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GCGCGCGCGC 11
    |||||
Db 10 GGCAGGCGGC 1

RESULT 62
AR210343/c
LOCUS      AR210343      11 bp      DNA      linear      PAT 20-JUN-2002
DEFINITION Sequence 44 from patent US 6387657.
ACCESSION  AR210343
VERSION     AR210343.1  GI:21512549
KEYWORDS    .
SOURCE      Unknown.
            Unknown.
ORGANISM     Unclassified.
REFERENCE   1 (bases 1 to 11)
AUTHORS     Botstein,D.A., Cohen,R.L., Goddard,A.D., Gurney,A.L., Hillan,K.J.,

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Lawrence, D.A., Levine, A.J., Pennica, D., Roy, M. Ann. and Wood, W.I.
WISP polypeptides and nucleic acids encoding same
Patent: US 6387657-A 44 14-MAY-2002;

TITLE
JOURNAL
FEATURES
source
1. .11
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 10
||| |||||
Db 11 CGGAGGCGG 2

RESULT 63
AR379421/c
LOCUS AR379421 11 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 79 from patent US 6607878.
ACCESSION AR379421
VERSION AR379421.1 GI:40087055
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 11)
AUTHORS Sorge, J.A.
TITLE Collections of uniquely tagged molecules
JOURNAL Patent: US 6607878-A 79 19-AUG-2003;
Stratagene; La Jolla, CA
FEATURES
source
1. .11
/organism="unknown"
/mol_type="genomic DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 10
||| |||||
Db 11 CGGAGGCGG 2

RESULT 64
AR428591/c
LOCUS AR428591 11 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 23 from patent US 6642024.
ACCESSION AR428591
VERSION AR428591.1 GI:40188232
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 11)
AUTHORS Pennica, D.
TITLE Guanylate-binding protein
JOURNAL Patent: US 6642024-A 23 04-NOV-2003;
Genentech Inc.; South San Francisco, CA
FEATURES
source
1. .11
/organism="unknown"
/mol_type="genomic DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 10
||| |||||
Db 11 CGGAGGCGG 2

RESULT 65
AR452741/c
LOCUS AR452741 11 bp DNA linear PAT 20-FEB-2004
DEFINITION Sequence 41 from patent US 6677437.
ACCESSION AR452741
VERSION AR452741.1 GI:42684714
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 11)
AUTHORS Nezu, J.-i. and Oku, A.
TITLE Serine-threonine kinase gene
JOURNAL Patent: US 6677437-A 41 13-JAN-2004;
Chugai Seiyaku Kabushiki Kaisha;;
JPX;
FEATURES
source
1. .11
/organism="unknown"
/mol_type="genomic DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 10
||| |||||
Db 11 CGGAGGCGG 2

RESULT 66
AR563499/c
LOCUS AR563499 11 bp DNA linear PAT 08-OCT-2004
DEFINITION Sequence 32 from patent US 6759514.
ACCESSION AR563499
VERSION AR563499.1 GI:53978545
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 11)
AUTHORS Nezu, J.-i. and Oku, A.
TITLE Transporter polypeptide and method of producing same
JOURNAL Patent: US 6759514-A 32 06-JUL-2004;
Chugai Seiyaku Kabushiki Kaisha; Tokyo;
JPX;
FEATURES
source
1. .11
/organism="unknown"
/mol_type="genomic DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 10
||| |||||
Db 11 CGGAGGCGG 2

RESULT 67
AR610555
LOCUS AR610555 11 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 677 from patent US 6825174.
ACCESSION AR610555
VERSION AR610555.1 GI:56666031
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 11)

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AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation
JOURNAL Patent: US 6825174-A 677 30-NOV-2004;
East Carolina University; Greenville, NC
FEATURES
source
1. .11
/organism="unknown"
/mol_type="genomic DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11
||| |||||
Db 2 GGAGGGCGGC 11

RESULT 68
AR610650
LOCUS AR610650 11 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 772 from patent US 6825174.
ACCESSION AR610650
VERSION AR610650.1 GI:56666126
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 11)
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
diseases and conditions associated with bronchoconstriction,
allergy(ies) & inflammation
JOURNAL Patent: US 6825174-A 772 30-NOV-2004;
East Carolina University; Greenville, NC
FEATURES
source
1. .11
/organism="unknown"
/mol_type="genomic DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
|||||||
Db 1 GCGGCGCATCG 10

RESULT 69
AX583616/c
LOCUS AX583616 11 bp DNA linear PAT 10-JAN-2003
DEFINITION Sequence 4 from Patent WO2072877.
ACCESSION AX583616
VERSION AX583616.1 GI:27655426
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Puurand,U.
TITLE Method for the detection of dna sequence variations
JOURNAL Patent: WO 02072877-A 4 19-SEP-2002;
University of Tartu (EE)
FEATURES
source
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="this is the sequence of chemically synthesized
oligo"

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Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGCGGCGG 10
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Db 11 CGGAGGGCGG 2

RESULT 70
AX628867/c
LOCUS AX628867 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 5908 from Patent WO02053774.
ACCESSION AX628867
VERSION AX628867.1 GI:28456905
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 5908 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
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/organism="Homo sapiens"
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/db_xref="taxon:9606"

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Best Local Similarity 90.0%; Pred. No. 52;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11
||| |||||
Db 10 GGCAGGCGGC 1

RESULT 71
I24595
LOCUS I24595 12 bp DNA linear PAT 07-OCT-1996
DEFINITION Sequence 23 from patent US 5545526.
ACCESSION I24595
VERSION I24595.1 GI:1604465
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 12)
AUTHORS Baxter-Lowe,L.Ann.
TITLE Method for HLA Typing
JOURNAL Patent: US 5545526-A 23 13-AUG-1996;
Location/Qualifiers
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/organism="unknown"
/mol_type="unassigned DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 59;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGCGGCGG 10
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Db 3 CGGCAGGCGG 12

RESULT 72
I36123
LOCUS I36123/c 12 bp DNA linear PAT 13-MAY-1997

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DEFINITION Sequence 5 from patent US 5604131.
ACCESSION I36123
VERSION I36123.1 GI:2087347
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 12)
AUTHORS Wadsworth,S., Snyder,B., Reddy,V.B. and Wei,C.
TITLE cDNA-genomic DNA hybrid sequence encoding APP770 containing a
JOURNAL genomic DNA insert of the KI and OX-2 regions
JOURNAL Patent: US 5604131-A 5 18-FEB-1997;
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    /mol_type="unassigned DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 59;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGGGCGGCAT 13
Db 10 CGGGCAGCAT 1

RESULT 73
AR199321/c
LOCUS AR199321
DEFINITION Sequence 30 from patent US 6355428.
ACCESSION AR199321
VERSION AR199321.1 GI:20249395
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 12)
AUTHORS Schroth,G.P., Bruice,T.Wayne. and Suh,Y.J.
TITLE Nucleic acid ligand interaction assays
JOURNAL Patent: US 6355428-A 30 12-MAR-2002;
FEATURES
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    /mol_type="unassigned DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 59;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
Db 12 GCGGGTATCG 3

RESULT 74
AR218371/c
LOCUS AR218371
DEFINITION Sequence 30 from patent US 6420109.
ACCESSION AR218371
VERSION AR218371.1 GI:23319068
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 12)
AUTHORS Schroth,G.P., Bruice,T.W. and Suh,Y.J.
TITLE Nucleic acid ligand interaction assays
JOURNAL Patent: US 6420109-A 30 16-JUL-2002;
JOURNAL Genelabs Technologies, Inc.; Redwood City, CA
FEATURES
source
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    /organism="unknown"
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Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 59;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
Db 12 GCGGGTATCG 3

RESULT 75
AR610532
LOCUS AR610532
DEFINITION Sequence 654 from patent US 6825174.
ACCESSION AR610532
VERSION AR610532.1 GI:56666008
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 12)
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
JOURNAL diseases and conditions associated with bronchoconstriction,
JOURNAL Patent: US 6825174-A 654 30-NOV-2004;
JOURNAL East Carolina University; Greenville, NC
FEATURES
source
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Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 59;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGCGC 11
Db 3 GGAGGGCGGC 12

RESULT 76
AR610649
LOCUS AR610649
DEFINITION Sequence 771 from patent US 6825174.
ACCESSION AR610649
VERSION AR610649.1 GI:56666125
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 12)
AUTHORS Nyce,J.W.
TITLE Composition, formulations & method for prevention & treatment of
JOURNAL diseases and conditions associated with bronchoconstriction,
JOURNAL Patent: US 6825174-A 771 30-NOV-2004;
JOURNAL East Carolina University; Greenville, NC
FEATURES
source
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    /organism="unknown"
    /mol_type="genomic DNA"

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 59;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
Db 1 GCGGGCATGG 10

RESULT 77
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A84635/c
LOCUS       A84635
DEFINITION  Sequence 4 from Patent WO9845430.
ACCESSION   A84635
VERSION     A84635.1 GI:6733549
KEYWORDS    unidentified
SOURCE      unidentified
ORGANISM    unclassified sequences.
REFERENCE   1
AUTHORS     Chernajovsky,Y. and Annenkov,A.
TITLE       Immune modulation by polypeptides related to crl
JOURNAL     Patent: WO 9845430-A 4 15-OCT-1998;
            CHERNAJOVSKY YUTY (GB); ANNENKOV ALEX (GB)
FEATURES   Location/Qualifiers
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                        /mol_type="unassigned DNA"
                        /db_xref="taxon:32644"
Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches          8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      4 CGGCGGCGC 11
Db      |||||

RESULT 78
BD091134/c
LOCUS       BD091134
DEFINITION  P53-induced apoptosis.
ACCESSION   BD091134
VERSION     BD091134.1 GI:22636744
KEYWORDS    JP 2001523441-A/12.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Vogelstein,B., Kinzler,K.W. and Polyak,K.
TITLE       P53-induced apoptosis
JOURNAL     Patent: JP 2001523441-A 12 27-NOV-2001;
            THE JOHNS HOPKINS UNIVERSITY
COMMENT     OS Homo sapiens (human)
            PN JP 2001523441-A/12
            PF 17-SEP-1998 JP 2000511894
            PR 17-SEP-1997 US 60/059153,30-MAR-1998 US 60/079817 P1
            BERT VOGELSTEIN,KENNETH W KINZLER,KORNELIA POLYAK PC
            C1201/68,C07K16/32,C12P21/08//C12N15/09,C12N15/00 CC P53-induced
            apoptosis
            FH Key Location/Qualifiers
            FT source          1..10
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FEATURES   Location/Qualifiers
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                        /mol_type="genomic DNA"
                        /db_xref="taxon:9606"
Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches          8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGGCGGCGC 8
Db      |||||

RESULT 79
BD091134/c
LOCUS       BD091134
DEFINITION  P53-induced apoptosis.
ACCESSION   BD091134
VERSION     BD091134.1 GI:22636744
KEYWORDS    JP 2001523441-A/12.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Vogelstein,B., Kinzler,K.W. and Polyak,K.
TITLE       P53-induced apoptosis
JOURNAL     Patent: JP 2001523441-A 12 27-NOV-2001;
            THE JOHNS HOPKINS UNIVERSITY
COMMENT     OS Homo sapiens (human)
            PN JP 2001523441-A/12
            PF 17-SEP-1998 JP 2000511894
            PR 17-SEP-1997 US 60/059153,30-MAR-1998 US 60/079817 P1
            BERT VOGELSTEIN,KENNETH W KINZLER,KORNELIA POLYAK PC
            C1201/68,C07K16/32,C12P21/08//C12N15/09,C12N15/00 CC P53-induced
            apoptosis
            FH Key Location/Qualifiers
            FT source          1..10
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FEATURES   Location/Qualifiers
            source          1..10
                        /organism="Homo sapiens"
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Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches          8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGGCGGCGC 8
Db      |||||

RESULT 79

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BD161401/c
LOCUS       BD161401
DEFINITION  Human activated Th1 and Th2 cell expression genes.
ACCESSION   BD161401
VERSION     BD161401.1 GI:27867159
KEYWORDS    JP 2002186482-A/223.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Nagai,S., Matsushima,K. and Hashimoto,S.
TITLE       Human activated Th1 and Th2 cell expression genes
JOURNAL     Patent: JP 2002186482-A 223 02-JUL-2002;
            JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT     OS Homo sapiens (human)
            PN JP 2002186482-A/223
            PF 02-JUL-2002
            PF 19-DEC-2000 JP 2000385816
            PI SHIGENORI NAGAI,KOJI MATSUSHIMA,SHINICHI HASHIMOTO PC
            C12N15/09,C07K14/47,C07K16/18,C12P21/08,C12N15/00 CC Human
            activated Th1 and Th2 cell expression genes FH Key
            Location/Qualifiers
            FT source          1..10
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FEATURES   Location/Qualifiers
            source          1..10
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Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches          8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGGCGGCGC 8
Db      |||||

RESULT 80
BD239824
LOCUS       BD239824
DEFINITION  Preparation and use of superior vaccines.
ACCESSION   BD239824
VERSION     BD239824.1 GI:33049594
KEYWORDS    JP 2002534056-A/1242.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Roberts,B.L. and Shankara,S.
TITLE       Preparation and use of superior vaccines
JOURNAL     Patent: JP 2002534056-A 1242 15-OCT-2002;
            GENZYME CORP
COMMENT     OS Homo sapiens (human)
            PN JP 2002534056-A/1242
            PD 15-OCT-2002
            PF 18-JUN-1999 JP 2000554749
            PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
            19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
            19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
            19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
            19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
            19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
            19-JUN-1998 US 60/090000,19-JUN-1998 US 60/090048 PR
            19-JUN-1998 US 60/089999,19-JUN-1998 US 60/090043 PR
            19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
            19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
            19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR

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19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15,PC
C12N1/19,
PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566,PC
G01N37/00,
PC C12N15/00,C12N5/00,C12N15/00
CC Preparation and use of superior vaccines
FH Key 10 bp DNA linear PAT 17-JUL-2003
FT source 1..10 Location/Qualifiers
/organism="Homo sapiens (human)".
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/db_xref="taxon:9606"

Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCG 9
Db 3 GCGGGCG 10

RESULT 81
BD240235 10 bp DNA linear PAT 17-JUL-2003
LOCUS Preparation and use of superior vaccines.
DEFINITION BD240235
ACCESSION BD240235.1 GI:33050005
VERSION JP 2002534056-A/1653.
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE 1 (bases 1 to 10)
AUTHORS Roberts,B.L. and Shankara,S.
TITILE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 1653 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/1653
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
19-JUN-1998 US 60/089997,19-JUN-1998 US 60/090079 PR
19-JUN-1998 US 60/090035,19-JUN-1998 US 60/089993 PR
19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
19-JUN-1998 US 60/089878,19-JUN-1998 US 60/089991 PR
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19-JUN-1998 US 60/090042,19-JUN-1998 US 60/090036 PR
19-JUN-1998 US 60/090044,19-JUN-1998 US 60/089844 PR
19-JUN-1998 US 60/090080,19-JUN-1998 US 60/089833 PR
19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
19-JUN-1998 US 60/090076,19-JUN-1998 US 60/090045 PR
08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15,PC
C12N1/19,
PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566,PC
G01N37/00,
PC C12N15/00,C12N5/00,C12N15/00
CC Preparation and use of superior vaccines
FH Key 10 bp DNA linear PAT 17-JUL-2003
FT source 1..10 Location/Qualifiers
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/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"

Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCG 9
Db 3 GCGGGCG 10

RESULT 82
E54841 10 bp DNA linear PAT 27-AUG-2002
LOCUS Human normal liver cell expression genes.
DEFINITION E54841
ACCESSION E54841
VERSION E54841.1 GI:22556324
KEYWORDS JP 2001211883-A/193.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE 1 (bases 1 to 10)
AUTHORS Matsushima,K., Hashimoto,S., Kaneko,S. and Yamashita,T.
TITILE Human normal liver cell expression genes
JOURNAL Patent: JP 2001211883-A 193 07-AUG-2001;
SCIENCE & TECH AGENCY
COMMENT OS Homo sapiens (human)
PN JP 2001211883-A/193
PD 07-AUG-2001
PF 31-JAN-2000 JP 2000023170
PI KOJI MATSUSHIMA,SHINICHI HASHIMOTO,SHUICHI KANEKO,TARO PI
YAMASHITA
PC C12N15/09,C07K16/18,C12P21/02,C12N15/00
CC
FH Key Location/Qualifiers.
/organism="Homo sapiens"
/mol_type="genomic DNA"
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FEATURES
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/mol_type="genomic DNA"
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Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 GGCATCGT 16
Db 1 GGCATCGT 8

RESULT 83
E54841 10 bp DNA linear PAT 26-SEP-2002
LOCUS Human normal liver cell expression genes.
DEFINITION E54841
ACCESSION E54841
VERSION E54841.1 GI:22556324
KEYWORDS JP 2001211883-A/193.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE 1 (bases 1 to 10)
AUTHORS Matsushima,K., Hashimoto,S., Kaneko,S. and Yamashita,T.
TITILE Human normal liver cell expression genes
JOURNAL Patent: JP 2001211883-A 193 07-AUG-2001;
SCIENCE & TECH AGENCY
COMMENT OS Homo sapiens (human)
PN JP 2001211883-A/193
PD 07-AUG-2001
PF 31-JAN-2000 JP 2000023170
PI KOJI MATSUSHIMA,SHINICHI HASHIMOTO,SHUICHI KANEKO,TARO PI
YAMASHITA
PC C12N15/09,C07K16/18,C12P21/02,C12N15/00
CC
FH Key Location/Qualifiers.
/organism="Homo sapiens"
/mol_type="genomic DNA"
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FEATURES
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/organism="Homo sapiens"
/mol_type="genomic DNA"
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Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCG 9
Db 3 GCGGGCG 10

RESULT 83
AR222959/c 10 bp DNA linear PAT 26-SEP-2002
LOCUS Sequence 12 from patent US 6432640.
DEFINITION AR222959
ACCESSION AR222959
VERSION AR222959.1 GI:23330797
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 10)
AUTHORS Polyak,K., Vogelstein,B. and Kinzler,K.W.
TITILE P53-induced apoptosis
JOURNAL Patent: US 6432640-A 12 13-AUG-2002;
The Johns Hopkins University; Baltimore, MD;

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FEATURES
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Query Match
Best Local Similarity 50.0%; Score 8; DB 1; Length 10;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGGCGGC 8
    |||||
Db 9 CGGGCGGC 2

RESULT 84
AR351643
LOCUS AR351643 10 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 101 from patent US 6588746.
ACCESSION AR351643
VERSION AR351643.1 GI:33753439
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Dobrindt,D. and Fischer,U.
TITLE Device for generating an offset of transported flexible sheet
JOURNAL Patent: US 6588746-A 101 08-JUL-2003;
NexPress Solutions LLC; Rochester, NY;
DEX;

FEATURES
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Query Match
Best Local Similarity 50.0%; Score 8; DB 1; Length 10;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 CGGGCGGC 10
    |||||
Db 1 CGGGCGGC 8

RESULT 85
AR351735
LOCUS AR351735 10 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 1277 from patent US 6588746.
ACCESSION AR351735
VERSION AR351735.1 GI:33753531
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Dobrindt,D. and Fischer,U.
TITLE Device for generating an offset of transported flexible sheet
JOURNAL Patent: US 6588746-A 1277 08-JUL-2003;
NexPress Solutions LLC; Rochester, NY;
DEX;

FEATURES
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Query Match
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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 CGGGCGGC 11
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Db 1 CGGGCGGC 8

RESULT 86
AR351879
LOCUS AR351879 10 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 1688 from patent US 6588746.
ACCESSION AR351879
VERSION AR351879.1 GI:33753675
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Dobrindt,D. and Fischer,U.
TITLE Device for generating an offset of transported flexible sheet
JOURNAL Patent: US 6588746-A 1688 08-JUL-2003;
NexPress Solutions LLC; Rochester, NY;
DEX;

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Db 1 CGGGCGGC 8

RESULT 87
AR351880
LOCUS AR351880 10 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 1689 from patent US 6588746.
ACCESSION AR351880
VERSION AR351880.1 GI:33753676
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Dobrindt,D. and Fischer,U.
TITLE Device for generating an offset of transported flexible sheet
JOURNAL Patent: US 6588746-A 1689 08-JUL-2003;
NexPress Solutions LLC; Rochester, NY;
DEX;

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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 CGGGCGGC 8

RESULT 88
AR534351/c
LOCUS AR534351 10 bp DNA linear PAT 08-OCT-2004
DEFINITION Sequence 1 from patent US 6733996.
ACCESSION AR534351
VERSION AR534351.1 GI:53924543
KEYWORDS

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SOURCE										Unknown.																													
ORGANISM										Unknown.																													
REFERENCE										Unclassified.																													
AUTHORS										1 (bases 1 to 10)																													
TITLE										Proehlich,A.C., Loros,J. and Dunlap,J.C.																													
JOURNAL										Methods for regulating gene expression using light																													
PATENT										US 6733996-A 1 11-MAY-2004;																													
TRUSTEES										Of Dartmouth College; Hanover, NH																													
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LOCUS										AX152713																													
DEFINITION										Sequence 628 from Patent WO0138577.																													
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VERSION										AX152713.1 GI:14534364																													
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										Hominidae; Homo.																													
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TITLE										Human transcriptomes																													
JOURNAL										Patent: WO 0138577-A 628 31-MAY-2001;																													
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ACCESSION										AX152714																													
VERSION										AX152714.1 GI:14534365																													
KEYWORDS										.																													
SOURCE										Homo sapiens (human)																													
ORGANISM										Homo sapiens																													
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										Hominidae; Homo.																													
REFERENCE										1																													
AUTHORS										Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.																													
TITLE										Human transcriptomes																													
JOURNAL										Patent: WO 0138577-A 629 31-MAY-2001;																													
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Db																																							
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RESULT 91																																							
LOCUS										AX152715																													
DEFINITION										Sequence 630 from Patent WO0138577.																													
ACCESSION										AX152715																													
VERSION										AX152715.1 GI:14534366																													
KEYWORDS										.																													
SOURCE										Homo sapiens (human)																													
ORGANISM										Homo sapiens																													
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										Hominidae; Homo.																													
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Db      10 CGCGGCGC 3
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RESULT 93
AX451293/c
LOCUS      AX451293          10 bp  DNA      linear      PAT 03-JUL-2002
DEFINITION Sequence 9 from Patent WO0218656.
ACCESSION  AX451293
VERSION     AX451293.1  GI:21698346
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   synthetic construct
           other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Weller,D.D. and Reddy,T.M.
TITLE      Method for analysis of oligonucleotide analogs
JOURNAL    Patent: WO 0218656-A 9 07-MAR-2002;
           Avi Biopharma, Inc. (US)
FEATURES   source
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Query Match      50.0%; Score 8; DB 1; Length 10;
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QY      9 GGCATCGT 16
Db      10 GGCATCGT 3
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RESULT 94
AX666652
LOCUS      AX666652          10 bp  DNA      linear      PAT 26-MAR-2003
DEFINITION Sequence 101 from Patent WO0242459.
ACCESSION  AX666652
VERSION     AX666652.1  GI:29291120
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   synthetic construct
           other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Liu,Q.
TITLE      Position dependent recognition of gnn nucleotide triplets by zinc
           fingers
JOURNAL    Patent: WO 0242459-A 101 30-MAY-2002;
           Sangamo Biosciences Inc. (US)
FEATURES   source
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Best Local Similarity 100.0%; Pred. No. 57;
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QY      3 CGCGGCGG 10
Db      1 GCGGCGG 8
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RESULT 95
AX667828
LOCUS      AX667828          10 bp  DNA      linear      PAT 26-MAR-2003
DEFINITION Sequence 1277 from Patent WO0242459.
ACCESSION  AX667828
VERSION     AX667828.1  GI:29291365
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   synthetic construct
           other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Liu,Q.
TITLE      Position dependent recognition of gnn nucleotide triplets by zinc
           fingers
JOURNAL    Patent: WO 0242459-A 1689 30-MAY-2002;

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KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   synthetic construct
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REFERENCE  1
AUTHORS    Liu,Q.
TITLE      Position dependent recognition of gnn nucleotide triplets by zinc
           fingers
JOURNAL    Patent: WO 0242459-A 1277 30-MAY-2002;
           Sangamo Biosciences Inc. (US)
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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3 GCGGCGG 10
Db      1 GCGGCGG 8
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RESULT 96
AX668239
LOCUS      AX668239          10 bp  DNA      linear      PAT 26-MAR-2003
DEFINITION Sequence 1688 from Patent WO0242459.
ACCESSION  AX668239
VERSION     AX668239.1  GI:29291518
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   synthetic construct
           other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Liu,Q.
TITLE      Position dependent recognition of gnn nucleotide triplets by zinc
           fingers
JOURNAL    Patent: WO 0242459-A 1688 30-MAY-2002;
           Sangamo Biosciences Inc. (US)
FEATURES   source
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Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4 CGGCGGC 11
Db      1 CGGCGGC 8
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RESULT 97
AX668240
LOCUS      AX668240          10 bp  DNA      linear      PAT 26-MAR-2003
DEFINITION Sequence 1689 from Patent WO0242459.
ACCESSION  AX668240
VERSION     AX668240.1  GI:29291519
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   synthetic construct
           other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Liu,Q.
TITLE      Position dependent recognition of gnn nucleotide triplets by zinc
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JOURNAL    Patent: WO 0242459-A 1689 30-MAY-2002;

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Best Local Similarity 100.0%; Pred. No. 57;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 CGGCGGGC 11
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Db 1 CGGCGGGC 8

RESULT 98
CQ837882/c
LOCUS CQ837882 11 bp DNA linear PAT 29-JUL-2004
DEFINITION Sequence 2940 from Patent WO2004059001.
ACCESSION CQ837882
VERSION CQ837882.1 GI:50837416
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
  1
AUTHORS Petersohn,D., Schlotmann,K., Gassenmeier,T., Holtkoetter,O.,
  Conradt,M. and Hofmann,K.
TITLE Method for determining markers of human facial skin
JOURNAL Patent: WO 2004059001-A 2940 15-JUL-2004;
Henkel Kommanditgesellschaft auf Aktien (DE)
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Query Match
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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGCGGGC 8
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Db 9 CGGCGGGC 2

RESULT 99
AX624022
LOCUS AX624022 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 1063 from Patent WO02053774.
ACCESSION AX624022
VERSION AX624022.1 GI:28451963
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
  1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 1063 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
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Sangamo Biosciences Inc. (US)
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Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 CGGCGGGC 11
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Db 1 CGGCGGGC 8

RESULT 98
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LOCUS CQ837882 11 bp DNA linear PAT 29-JUL-2004
DEFINITION Sequence 2940 from Patent WO2004059001.
ACCESSION CQ837882
VERSION CQ837882.1 GI:50837416
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
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AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 1063 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
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Best Local Similarity 100.0%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGGC 9
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Db 3 GCGCGGGC 10

RESULT 100
AX629700/c
LOCUS AX629700 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 6741 from Patent WO02053774.
ACCESSION AX629700
VERSION AX629700.1 GI:28457738
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
  1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 6741 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
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Query Match
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Best Local Similarity 100.0%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGCGGGC 8
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Db 9 CGGCGGGC 2

RESULT 101
AX631443
LOCUS AX631443 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 8485 from Patent WO02053774.
ACCESSION AX631443
VERSION AX631443.1 GI:28459509
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
  1
AUTHORS Petersohn,D., Conradt,M. and Hofmann,K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 8485 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
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Query Match
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Best Local Similarity 100.0%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGGC 9
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Db 3 GCGCGGGC 10

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RESULT 102
LOCUS      CQ779064/c
DEFINITION Sequence 8 from Patent WO2004015099.
ACCESSION  CQ779064
VERSION     CQ779064.1 GI:45381711
KEYWORDS   synthetic construct
SOURCE     other sequences; artificial sequences.
ORGANISM
REFERENCE
AUTHORS    Blemans R., Denoel P., Feron C., Goraj K., Jennings M.P.,
            Poolman J. and Weynants V.
TITLE      Vaccine composition
JOURNAL    Patent: WO 2004015099-A 8 19-FEB-2004;
            GlaxoSmithKline Biologicals S.A. (BE); THE UNIVERSITY OF QUEENSLAND
            (AU)
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QY 5 GGGCGGCATCG 15
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Db 11 GGGCGGGGGCG 1

RESULT 103
LOCUS      CQ832733/c
DEFINITION Sequence 104 from Patent WO2004059002.
ACCESSION  CQ832733
VERSION     CQ832733.1 GI:50832340
KEYWORDS   Homo sapiens (human)
SOURCE     Homo sapiens
ORGANISM   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
REFERENCE
AUTHORS    Petersohn D., Schlotmann K., Gassenmeier T., Holtkoetter O.,
            Conradt M. and Hofmann K.
TITLE      Method for determining the homeostasis of hairy skin
JOURNAL    Patent: WO 2004059002-A 104 15-JUL-2004;
            Henkel Kommanditgesellschaft auf Aktien (DE)
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QY 2 GGGCGGGCGGCA 12
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Db 11 GGGGGGGCAGCA 1

RESULT 104
LOCUS      CQ833830/c
DEFINITION Sequence 1201 from Patent WO2004059002.
ACCESSION  CQ833830
VERSION     CQ833830.1 GI:50833437
KEYWORDS   CQ833830
            11 bp DNA linear PAT 29-JUL-2004

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SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
REFERENCE
AUTHORS    Petersohn D., Schlotmann K., Gassenmeier T., Holtkoetter O.,
            Conradt M. and Hofmann K.
TITLE      Method for determining the homeostasis of hairy skin
JOURNAL    Patent: WO 2004059002-A 1201 15-JUL-2004;
            Henkel Kommanditgesellschaft auf Aktien (DE)
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QY 2 GGGCGGGCGGCA 12
    |||||
Db 11 GGGCGGGGGCGCA 1

RESULT 105
LOCUS      CQ835561
DEFINITION Sequence 619 from Patent WO2004059001.
ACCESSION  CQ835561
VERSION     CQ835561.1 GI:50835095
KEYWORDS   Homo sapiens (human)
SOURCE     Homo sapiens
ORGANISM   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
REFERENCE
AUTHORS    Petersohn D., Schlotmann K., Gassenmeier T., Holtkoetter O.,
            Conradt M. and Hofmann K.
TITLE      Method for determining markers of human facial skin
JOURNAL    Patent: WO 2004059001-A 619 15-JUL-2004;
            Henkel Kommanditgesellschaft auf Aktien (DE)
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QY 2 GGGCGGGCGGCA 12
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Db 1 GGGCGGGGGCGCA 11

RESULT 106
LOCUS      E13679/c
DEFINITION Substrate of minizyme.
ACCESSION  E13679
VERSION     E13679.1 GI:5708690
KEYWORDS   JP 1997224673-A/7.
SOURCE     unidentified
ORGANISM   unclassified.
REFERENCE  1 (bases 1 to 11)
AUTHORS    Taira K., Nishikawa S., Yamada A. and Hanada K.
TITLE      PAIR OF MINIRIBOZYME, MINIRIBOZYME-DIMER, CUTTING-DEACTIVATION OF
            TARGET RNA BY THEM AND MEDICINE

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JOURNAL Patent: JP 1997224673-A 7 02-SEP-1997;
 AGENCY OF IND SCIENCE & TECHNOLOGY, HITACHI CHEM CO LTD, TAISHO
 PHARMACEUT CO LTD

COMMENT OS None
 OC Artificial sequences.
 PN JP 1997224673-A/7
 PD 02-SEP-1997
 PF 22-FEB-1996 JP 1996034898
 PI TAHIRA KAZUNASA, NISHIKAWA SATOSHI, YAMADA AKIRA, PI HANADA KAZUNORI

PC C12N15/09, A61K48/00, A61K48/00, A61K48/00, A61K49/00, C07H21/02,
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 PC C12N9/16, C1201/68/A01N63/00;
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 /mol_type='genomic RNA'
 /db_xref='taxon:32644'

Query Match 48.8%; Score 7.8; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 72;
 Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CGCGGGCGGC 11
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 DB 11 CGGGGACGCG 1

RESULT 107
 I08900/C
 LOCUS 108900 11 bp DNA linear PAT 02-DEC-1994
 DEFINITION Sequence 13 from Patent WO 8807076.
 ACCESSION I08900
 VERSION I08900.1 GI:588373
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 11)
 AUTHORS Maugh, K.J., Anderson, D.M., Strausberg, S.L., Strausberg, R. and Wei, T.
 TITLE PRODUCTION OF BIOADHESIVE PRECURSOR PROTEIN ANALOGS BY GENETICALLY-ENGINEERED ORGANISMS
 JOURNAL Patent: WO 8807076-A 13 22-SEP-1988;
 FEATURES Location/Qualifiers
 source 1. .11
 /organism='unknown'
 /mol_type='unassigned DNA'

Query Match 48.8%; Score 7.8; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 72;
 Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 GGCGGCGCATCG 15
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 DB 11 GGCGGCGCATCG 1

RESULT 108
 I18784
 LOCUS I18784 11 bp DNA linear PAT 07-OCT-1996
 DEFINITION Sequence 77 from patent US 5498530.
 ACCESSION I18784
 VERSION I18784.1 GI:1599139
 KEYWORDS
 SOURCE Unknown.

ORGANISM Unknown.
 REFERENCE Unclassified.
 1 (bases 1 to 11)
 AUTHORS Schatz, P.J., Cull, M.G., Miller, J.F. and Stemmer, W.P.C.
 TITLE Peptide library and screening method
 JOURNAL Patent: US 5498530-A 77 12-MAR-1996;
 FEATURES Location/Qualifiers
 source 1. .11
 /organism='unknown'
 /mol_type='unassigned DNA'

Query Match 48.8%; Score 7.8; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 72;
 Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 6 GGCGGCGCATCGT 16
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 DB 1 GGCGGCGCATCGT 11

RESULT 109
 I95620
 LOCUS I95620 11 bp DNA linear PAT 01-DEC-1998
 DEFINITION Sequence 77 from patent US 5733731.
 ACCESSION I95620
 VERSION I95620.1 GI:3940090
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 11)
 AUTHORS Schatz, P.J., Cull, M.G., Miller, J.F., Stemmer, W.Peter, Christiaan.
 TITLE Peptide library and screening method
 JOURNAL Patent: US 5733731-A 77 31-MAR-1998;
 FEATURES Location/Qualifiers
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 /organism='unknown'
 /mol_type='unassigned DNA'

Query Match 48.8%; Score 7.8; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 72;
 Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 6 GGCGGCGCATCGT 16
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 DB 1 GGCGGCGCATCGT 11

RESULT 110
 AX099035
 LOCUS AX099035 98 from Patent WO0120026.
 DEFINITION
 ACCESSION AX099035
 VERSION AX099035.1 GI:13538245
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Wojnowski, L. and Hustert, E.
 TITLE Polymorphisms in the human hpxr gene and their use in diagnostic and therapeutic applications
 JOURNAL Patent: WO 0120026-A 98 22-MAR-2001;
 EpiDauros Biotechnologie AG (DE)
 FEATURES Location/Qualifiers
 source 1. .11
 /organism='synthetic construct'
 /mol_type='unassigned DNA'
 /db_xref='taxon:32630'
 /note='artificial sequence'

Query Match 48.8%; Score 7.8; DB 1; Length 11;

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Best Local Similarity 81.8%; Pred. No. 72;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3 GCGGCGGCAT 13
Db 1 GAGAGCGGCAT 11

RESULT 111
AX099036/c
LOCUS AX099036 11 bp DNA linear PAT 02-APR-2001
DEFINITION Sequence 99 from Patent WO0120026.
ACCESSION AX099036
VERSION AX099036.1 GI:13538246
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Wojnowski, L. and Hustert, E.
TITLE Polymorphisms in the human hpxr gene and their use in diagnostic
JOURNAL and therapeutic applications
JOURNAL Patent: WO 0120026-A 99 22-MAR-2001;
Epidaurus Biotechnologie AG (DE)
FEATURES
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/db_xref="taxon:32630"
/note="artificial sequence"

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 72;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3 GCGGCGGCAT 13
Db 11 GAGAGCGGCAT 1

RESULT 112
AX453851/c
LOCUS AX453851 11 bp RNA linear PAT 06-JUL-2002
DEFINITION Sequence 10 from Patent EP1213351.
ACCESSION AX453851
VERSION AX453851.1 GI:21713520
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Taira, K., Warashina, M. and Warashina, T.
TITLE Nucleic acid enzymes acquiring an activity for cleaving a target
JOURNAL rna by recognising another molecule
JOURNAL Patent: EP 1213351-A 10 12-JUN-2002;
National Institute of Advanced Industrial Science and Technology
(JP)
FEATURES
source
1. .11
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
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Query Match 48.8%; Score 7.8; DB 1; Length 11;
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Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 CGGCGGCGGC 11
Db 11 CGGCGGCGGC 1

Best Local Similarity 81.8%; Pred. No. 72;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3 GCGGCGGCAT 13
Db 1 GAGAGCGGCAT 11

RESULT 113
AX624323/c
LOCUS AX624323 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 1364 from Patent WO02053774.
ACCESSION AX624323
VERSION AX624323.1 GI:28452264
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Petersohn, D., Conradt, M. and Hofmann, K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 1364 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
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source
1. .11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 72;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3 GCGGCGGCAT 13
Db 11 GCGTGGCCAT 1

RESULT 114
AX625450/c
LOCUS AX625450 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 2491 from Patent WO02053774.
ACCESSION AX625450
VERSION AX625450.1 GI:28453391
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Petersohn, D., Conradt, M. and Hofmann, K.
TITLE Method for determining homeostasis of the skin
JOURNAL Patent: WO 02053774-A 2491 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
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1. .11
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 72;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 CGGCGGCGGC 11
Db 11 CGTAGGCGGC 1

RESULT 115
AX628000/c
LOCUS AX628000 11 bp DNA linear PAT 21-FEB-2003
DEFINITION Sequence 5041 from Patent WO02053774.
ACCESSION AX628000
VERSION AX628000.1 GI:28456038
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominoidea; Homo.
1
REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 5041 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
source       Location/Qualifiers
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                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"

Query Match      48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 72;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GCGGGGGGCA 12
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Db 11 GCGGGGGGCA 1

RESULT 116
LOCUS      AX629602              11 bp      DNA      linear      PAT 21-FEB-2003
DEFINITION Sequence 6643 from Patent WO02053774.
ACCESSION  AX629602
VERSION     AX629602.1 GI:28457640
KEYWORDS    .
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
             Hominoidea; Homo.
1
REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 6643 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
source       Location/Qualifiers
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                /mol_type="unassigned DNA"
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Query Match      48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 72;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CGCGGGGGGC 11
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Db 11 CGCGGGGGTC 1

RESULT 117
LOCUS      AX631744              11 bp      DNA      linear      PAT 21-FEB-2003
DEFINITION Sequence 8786 from Patent WO02053774.
ACCESSION  AX631744
VERSION     AX631744.1 GI:28459851
KEYWORDS    .
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
             Hominoidea; Homo.
1
REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 8786 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominoidea; Homo.
1
REFERENCE
AUTHORS      Petersohn,D., Conradt,M. and Hofmann,K.
TITLE        Method for determining homeostasis of the skin
JOURNAL      Patent: WO 02053774-A 5041 11-JUL-2002;
              Henkel Kommanditgesellschaft auf Aktien (DE)
FEATURES
source       Location/Qualifiers
              1. .11
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                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"

Query Match      48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 72;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CGCGGGGGGC 11
    |||||
Db 11 CGCGGGGGTC 1

RESULT 118
LOCUS      AR053553              10 bp      DNA      linear      PAT 29-SEP-1999
DEFINITION Sequence 18 from patent US 5834248.
ACCESSION  AR053553
VERSION     AR053553.1 GI:5978415
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
             1 (bases 1 to 10)
             Falb,D.
             Compositions and methods using rchd534, a gene upregulated by shear
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             Patent: US 5834248-A 18 10-NOV-1998;
             Location/Qualifiers
               1. .10
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Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCATC 14
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Db 10 GCGTCATC 2

RESULT 119
LOCUS      AR065880              10 bp      DNA      linear      PAT 29-SEP-1999
DEFINITION Sequence 18 from patent US 5849578.
ACCESSION  AR065880
VERSION     AR065880.1 GI:5996096
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
             1 (bases 1 to 10)
             Falb,D.A.
             Compositions and methods for the treatment and diagnosis of
             cardiovascular using RCHD528 as a target
             Patent: US 5849578-A 18 15-DEC-1998;
             Location/Qualifiers
               1. .10
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Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCATC 14
    |||||
Db 10 GCGTCATC 2

RESULT 120
LOCUS      AR065880              10 bp      DNA      linear      PAT 29-SEP-1999
DEFINITION Sequence 18 from patent US 5849578.
ACCESSION  AR065880
VERSION     AR065880.1 GI:5996096
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
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             Falb,D.A.
             Compositions and methods for the treatment and diagnosis of
             cardiovascular using RCHD528 as a target
             Patent: US 5849578-A 18 15-DEC-1998;
             Location/Qualifiers
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                 /organism="unassigned DNA"

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCATC 14
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Db 10 GCGTCATC 2

RESULT 120
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AR071785
LOCUS AR071785 10 bp DNA linear PAT 18-FEB-2000
DEFINITION Sequence 14 from patent US 5912147.
ACCESSION AR071785
VERSION AR071785.1 GI:7222673
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Stoler,D., Basik,M. and Anderson,G.
TITLE Rapid means of quantitating genomic instability
JOURNAL Patent: US 5912147-A 14 15-JUN-1999;
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/organism="unknown"
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Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGCGGC 11
Db 2 GCGGCGGC 10

RESULT 121
AR080362/c
LOCUS AR080362 10 bp DNA linear PAT 31-AUG-2000
DEFINITION Sequence 18 from patent US 5968770.
ACCESSION AR080362
VERSION AR080362.1 GI:10007097
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Falb,D.A. and Gimbrone,M.A. Jr.
TITLE Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd523 as a target
JOURNAL Patent: US 5968770-A 18 19-OCT-1999;
FEATURES
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1. .10
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Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGATC 14
Db 10 GCGTGCATC 2

RESULT 122
AR148317/c
LOCUS AR148317 10 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 18 from patent US 6225084.
ACCESSION AR148317
VERSION AR148317.1 GI:15112407
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Falb,D.A. and Gimbrone,M.A. Jr.
TITLE Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd534 as a target
JOURNAL Patent: US 6225084-A 18 01-MAY-2001;
FEATURES
source
1. .10
Location/Qualifiers

AR071785
LOCUS AR071785 10 bp DNA linear PAT 18-FEB-2000
DEFINITION Sequence 14 from patent US 5912147.
ACCESSION AR071785
VERSION AR071785.1 GI:7222673
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Stoler,D., Basik,M. and Anderson,G.
TITLE Rapid means of quantitating genomic instability
JOURNAL Patent: US 5912147-A 14 15-JUN-1999;
FEATURES
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1. .10
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Query Match 46.3%; Score 7.4; DB 1; Length 10;
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Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGCGGC 11
Db 2 GCGGCGGC 10

RESULT 121
AR080362/c
LOCUS AR080362 10 bp DNA linear PAT 31-AUG-2000
DEFINITION Sequence 18 from patent US 5968770.
ACCESSION AR080362
VERSION AR080362.1 GI:10007097
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Falb,D.A. and Gimbrone,M.A. Jr.
TITLE Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd523 as a target
JOURNAL Patent: US 5968770-A 18 19-OCT-1999;
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/organism="unknown"
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Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGATC 14
Db 10 GCGTGCATC 2

RESULT 122
AR148317/c
LOCUS AR148317 10 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 18 from patent US 6225084.
ACCESSION AR148317
VERSION AR148317.1 GI:15112407
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Falb,D.A. and Gimbrone,M.A. Jr.
TITLE Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd534 as a target
JOURNAL Patent: US 6225084-A 18 01-MAY-2001;
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source
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Location/Qualifiers


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/organism="unknown"
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Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGATC 14
Db 10 GCGTGCATC 2

RESULT 123
BD065267
LOCUS BD065267 10 bp DNA linear PAT 27-AUG-2002
DEFINITION Characterization of the yeast transcriptome.
ACCESSION BD065267
VERSION BD065267.1 GI:22610870
KEYWORDS JP 2001509017-A/203.
SOURCE Saccharomyces cerevisiae (baker's yeast)
ORGANISM Saccharomyces cerevisiae
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
REFERENCE 1 (bases 1 to 10)
AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Characterization of the yeast transcriptome
JOURNAL Patent: JP 2001509017-A 203 10-JUL-2001;
COMMENT THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
OS Saccharomyces cerevisiae (yeast)
PN JP 2001509017-A/203
PF 22-JAN-1998 JP 1998532117
PI VICTOR E VELCULESCU,BERT VOGELSTEIN,KENNETH W KINZLER PC
C12N15/10,C12N15/31,C07K14/395,C12Q1/68,C12Q1/02 CC
Characterization of the yeast transcriptome
FH Key Location/Qualifiers
FT source 1. .10
FT /organism='Saccharomyces cerevisiae (yeast)'.
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Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGCGGCG 9
Db 2 CGCGCGGTG 10

RESULT 124
BD083132/c
LOCUS BD083132 10 bp DNA linear PAT 27-AUG-2002
DEFINITION Human matured/activated dendritic cell expression genes.
ACCESSION BD083132
VERSION BD083132.1 GI:22628742
KEYWORDS JP 2001327293-A/53.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE 1 (bases 1 to 10)
AUTHORS Matsushima,K., Hashimoto,S., Suzuki,T. and Nagai,S.
TITLE Human matured/activated dendritic cell expression genes
JOURNAL Patent: JP 2001327293-A 53 27-NOV-2001;
COMMENT JAPAN SCIENCE AND TECHNOLOGY CORP
OS Homo sapiens (human)
PN JP 2001327293-A/53


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PD 27-NOV-2001
PF 22-MAY-2000 JP 2000150562
PI KOJI MATSUSHIMA,SHINICHI HASHIMOTO,TAKUJI SUZUKI,SHIGENORI PI
NAGAI
PC C12N15/09,C07K14/47,C07K16/18//C12P21/02,C12P21/08,C12N15/00
CC
FH Key Location/Qualifiers.
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        /mol_type="genomic DNA"
        /db_xref="taxon:9606"
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGGCGGC 11
    ||| |||||
Db 10 GCGGGCGGC 2

RESULT 125
BD083292 10 bp DNA linear PAT 27-AUG-2002
DEFINITION Human matured/activated dendritic cell expression genes.
ACCESSION BD083292
VERSION BD083292.1 GI:22628902
KEYWORDS JP 2001327293-A/213.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
Matsushima,K., Hashimoto,S., Suzuki,T. and Nagai,S.
Human matured/activated dendritic cell expression genes
Patent: JP 2001327293-A 213 27-NOV-2001;
JAPAN SCIENCE AND TECHNOLOGY CORP
OS Homo sapiens (human)
PN JP 2001327293-A/213
PD 27-NOV-2001
PF 22-MAY-2000 JP 2000150562
PI KOJI MATSUSHIMA,SHINICHI HASHIMOTO,TAKUJI SUZUKI,SHIGENORI PI
NAGAI
PC C12N15/09,C07K14/47,C07K16/18//C12P21/02,C12P21/08,C12N15/00
CC
FH Key Location/Qualifiers.
FEATURES
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        /mol_type="genomic DNA"
        /db_xref="taxon:9606"
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 CGGCGGGCG 9
    ||| |||||
Db 2 CGAGGGGCG 10

RESULT 126
BD161209/c
LOCUS BD161209 10 bp DNA linear PAT 17-JAN-2003
DEFINITION Human activated Th1 and Th2 cell expression genes.
ACCESSION BD161209
VERSION BD161209.1 GI:27866967
KEYWORDS JP 2002186482-A/31.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
Matsushima,K. and Hashimoto,S.
Human activated Th1 and Th2 cell expression genes
Patent: JP 2002186482-A 31 02-JUL-2002;
JAPAN SCIENCE AND TECHNOLOGY CORP
OS Homo sapiens (human)
PN JP 2002186482-A/31
PD 02-JUL-2002
PF 19-DEC-2000 JP 2000385816
PI SHIGENORI NAGAI,KOJI MATSUSHIMA,SHINICHI HASHIMOTO PC
C12N15/09,C07K14/47,C07K16/18,C12P21/08,C12N15/00 CC Human
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QY 3 GCGGGCGGC 11
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Db 10 GCGGGCGGC 2

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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
Nagai,S., Matsushima,K. and Hashimoto,S.
Human activated Th1 and Th2 cell expression genes
Patent: JP 2002186482-A 31 02-JUL-2002;
JAPAN SCIENCE AND TECHNOLOGY CORP
OS Homo sapiens (human)
PN JP 2002186482-A/31
PD 02-JUL-2002
PF 19-DEC-2000 JP 2000385816
PI SHIGENORI NAGAI,KOJI MATSUSHIMA,SHINICHI HASHIMOTO PC
C12N15/09,C07K14/47,C07K16/18,C12P21/08,C12N15/00 CC Human
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Db 10 GCGGGCGGC 2

RESULT 127
BD161250/c
LOCUS BD161250 10 bp DNA linear PAT 17-JAN-2003
DEFINITION Human activated Th1 and Th2 cell expression genes.
ACCESSION BD161250
VERSION BD161250.1 GI:27867008
KEYWORDS JP 2002186482-A/72.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
Nagai,S., Matsushima,K. and Hashimoto,S.
Human activated Th1 and Th2 cell expression genes
Patent: JP 2002186482-A 72 02-JUL-2002;
JAPAN SCIENCE AND TECHNOLOGY CORP
OS Homo sapiens (human)
PN JP 2002186482-A/72
PD 02-JUL-2002
PF 19-DEC-2000 JP 2000385816
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C12N15/09,C07K14/47,C07K16/18,C12P21/08,C12N15/00 CC Human
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ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
AUTHORS Roberts,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 205 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/205
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
19-JUN-1998 US 60/090041,19-JUN-1998 US 60/089853 PR
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19-JUN-1998 US 60/089992,19-JUN-1998 US 60/090072 PR
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08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
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PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566,PC
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PC C12N15/00,C12N5/00,C12N15/00
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LOCUS 10 bp DNA linear PAT 17-JUL-2003
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD238822
VERSION BD238822.1 GI:33048592
KEYWORDS JP 2002534056-A/240.
SOURCE Homo sapiens (human)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
AUTHORS Roberts,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 240 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/240
PD 15-OCT-2002

PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
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19-JUN-1998 US 60/090078,19-JUN-1998 US 60/090047 PR
08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15,PC
C12N1/19,
PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566,PC
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PC C12N15/00,C12N5/00,C12N15/00
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Db 2 CGACGGGCG 10
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BD239058/c
LOCUS 10 bp DNA linear PAT 17-JUL-2003
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD239058
VERSION BD239058.1 GI:33048828
KEYWORDS JP 2002534056-A/476.
SOURCE Homo sapiens (human)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
AUTHORS Roberts,B.L. and Shankara,S.
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 476 15-OCT-2002;
GENZYME CORP
COMMENT OS Homo sapiens (human)
PN JP 2002534056-A/476
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
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19-JUN-1998 US 60/089994,19-JUN-1998 US 60/090077 PR
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08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
C12N1/19,
PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
G01N37/00,
PC C12N15/00,C12N5/00,C12N15/00
CC Preparation and use of superior vaccines
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QY 8 CGGCATCGT 16
DB 10 CGGCCTCGT 2
RESULT 134
CQ793722/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
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AUTHORS
TITLE
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DB 10 GCGTGCATC 2
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DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
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AUTHORS
TITLE
Method for selective detection of a target nucleic acid

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JOURNAL Patent: WO 2005003384-A 22 13-JAN-2005;
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DB 1 GACGGGCGG 9
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LOCUS
DEFINITION
ACCESSION
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SOURCE
ORGANISM
REFERENCE
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AUTHORS
TITLE
JOURNAL
COMMENT
OS Homo sapiens (human)
PN JP 2000279181-A/78
PP 10-OCT-2000
PP 01-APR-1999 JP 1999095481
PR SHINICHI HASHIMOTO,KOJI MATSUSHIMA,TAKUJI SUZUKI PC
C12N15/09,C07K14/475,C07K16/18,C12N15/00
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Best Local Similarity 88.9%; Pred. No. 77;
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DB 10 GCCGGGCGG 2
RESULT 137
E54713/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
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AUTHORS
TITLE
Human normal liver cell expression genes.
E54713
E54713.1 GI:22556196
JP 2001211883-A/65.
Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;

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REFERENCE 1 (bases 1 to 10)
AUTHORS Hominidae: Homo.
TITLE Matsushima,K., Hashimoto,S., Kaneko,S. and Yamashita,T.
JOURNAL Human normal liver cell expression genes
COMMENT Patent: JP 2001211883-A 65 07-AUG-2001;
SCIENCE & TECH AGENCY
OS Homo sapiens (human)
PN JP 2001211883-A/65
PD 07-AUG-2001
PF 31-JAN-2000 JP 2000023170
PI KOJI MATSUSHIMA,SHINICHI HASHIMOTO,SHUICHI KANEKO,TARO PI
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QY 3 GCGGGCGC 11
DB 10 GCGGGCGC 2
RESULT 138
LOCUS AR216693/C 10 bp DNA linear PAT 25-SEP-2002
DEFINITION Sequence 18 from patent US 6410749.
ACCESSION AR216693
VERSION AR216693.1 GI:23315331
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Katayama,E., Sato,D., Ooka,H. and Inoue,T.
TITLE Process for the preparation of optically active amino alcohols
JOURNAL Patent: US 6410749-A 18 25-JUN-2002;
Nippon Soda Co., Ltd.; Tokyo;
JPX;
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source Location/Qualifiers
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Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GCGGGCGG 10
DB 10 GCGGGCGG 2
RESULT 139
LOCUS AR351742 10 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 1284 from patent US 6588746.
ACCESSION AR351742
VERSION AR351742.1 GI:33753538
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Dobrindt,D. and Fischer,U.
TITLE Device for generating an offset of transported flexible sheet

material
Patent: US 6588746-A 1284 08-JUL-2003;
NexPress Solutions LLC; Rochester, NY;
DEX;
JOURNAL
FEATURES
source Location/Qualifiers
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Best Local Similarity 88.9%; Pred. No. 77;
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QY 7 GCGGCATCG 15
DB 1 GCGGCATCG 9
RESULT 140
LOCUS AR534352/C 10 bp DNA linear PAT 08-OCT-2004
DEFINITION Sequence 2 from patent US 6733996.
ACCESSION AR534352
VERSION AR534352.1 GI:53924544
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Froehlich,A.C., Loros,J. and Dunlap,J.C.
TITLE Methods for regulating gene expression using light
JOURNAL Patent: US 6733996-A 2 11-MAY-2004;
Trustees of Dartmouth College; Hanover, NH
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source Location/Qualifiers
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QY 7 GCGGCATCG 15
DB 9 GCGTCATCG 1
RESULT 141
LOCUS AR584164/C 10 bp DNA linear PAT 15-DEC-2004
DEFINITION Sequence 18 from patent US 6794559.
ACCESSION AR584164
VERSION AR584164.1 GI:56622361
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 10)
AUTHORS Sprunck,S., Kluth,A., Becker,D., Luetticke,S. and Loerz,H.
TITLE Promoters for gene expression in caryopses of plants
JOURNAL Patent: US 6794559-A 18 21-SEP-2004;
Bayer CropScience GmbH; Frankfurt am Main;
WOX;
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RESULT 142
LOCUS   AR610556
DEFINITION Sequence 678 from patent US 6825174.
ACCESSION AR610556
VERSION   AR610556.1 GI:56666032
KEYWORDS
SOURCE   Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 10)
AUTHORS  Kim,J.P., Starr,D.B., Tam,A.W., Laurance,M.E., Michelotti,E.F.,
          Velligan,M.D., Latour,D.R., Thomas,R.L., Kongpachith,A.,
          Sheppard,L.T., Kim,M.Y. and Bruice,T.W.
TITLE    Promoters for regulated gene expression
JOURNAL  Patent: US 6838556-A 194 04-JAN-2005;
          Genelabs Technologies, Inc.; Redwood City, CA
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Db      1 GCGGCGCG 9

RESULT 143
LOCUS   AR610667
DEFINITION Sequence 789 from patent US 6825174.
ACCESSION AR610667
VERSION   AR610667.1 GI:56666143
KEYWORDS
SOURCE   Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 10)
AUTHORS  Nyce,J.W.
TITLE    Composition, formulations & method for prevention & treatment of
          diseases and conditions associated with bronchoconstriction,
          allergy(ies) & inflammation
JOURNAL  Patent: US 6825174-A 678 30-NOV-2004;
          East Carolina University; Greenville, NC
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Db      2 GCGGCGCG 10

RESULT 144
LOCUS   AR630140
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ACCESSION AR630140
VERSION   AR630140.1 GI:59762459
KEYWORDS

QY      7 GCGGCGATCG 15
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Db      1 GCGGCGATCG 9

RESULT 145
LOCUS   AX104949/c
DEFINITION Sequence 1141 from Patent WO0122972.
ACCESSION AX104949
VERSION   AX104949.1 GI:13921146
KEYWORDS
SOURCE   synthetic construct
          synthetic construct
          other sequences; artificial sequences.
ORGANISM
REFERENCE 1
AUTHORS  Krieg,A.M., Schetter,C. and Vollmer,J.C.
TITLE    Immunostimulatory nucleic acids
JOURNAL  Patent: WO 0122972-A 1141 05-APR-2001;
          UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
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Db      9 CGGCATCGT 1

RESULT 146
LOCUS   AX152112/c
DEFINITION Sequence 27 from Patent WO0138577.
ACCESSION AX152112
VERSION   AX152112.1 GI:14533763
KEYWORDS
SOURCE   Homo sapiens (human)
ORGANISM Homo sapiens
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          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Hominidae; Homo.
REFERENCE 1
AUTHORS  Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE    Human transcriptomes
JOURNAL  Patent: WO 0138577-A 27 31-MAY-2001;
          The Johns Hopkins University (US)
FEATURES
          Location/Qualifiers

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QY 5 GGGCGGCAT 13
Db 10 GGGCGGCAT 2

RESULT 147
AX152142
LOCUS AX152142 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 57 from Patent WO0138577.
ACCESSION AX152142
VERSION AX152142.1 GI:14533793
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
1 Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
AUTHORS Human transcriptomes
TITLE Patent: WO 0138577-A 57 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)
FEATURES
source
1. .10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 46.3%; Score 7.4; DB 1; Length 10;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGGGCGGCA 12
Db 1 CAGGCGGCA 9

RESULT 148
AX152214/c
LOCUS AX152214 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 129 from Patent WO0138577.
ACCESSION AX152214
VERSION AX152214.1 GI:14533865
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
1 Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
AUTHORS Human transcriptomes
TITLE Patent: WO 0138577-A 129 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)
FEATURES
source
1. .10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 46.3%; Score 7.4; DB 1; Length 10;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGGGCGGCA 12
Db 1 CAGGCGGCA 9

RESULT 149
AX152324/c
LOCUS AX152324 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 239 from Patent WO0138577.
ACCESSION AX152324
VERSION AX152324.1 GI:14533975
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
1 Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
AUTHORS Human transcriptomes
TITLE Patent: WO 0138577-A 239 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)
FEATURES
source
1. .10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 46.3%; Score 7.4; DB 1; Length 10;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGGCG 9
Db 9 CGAGCGGGC 1

RESULT 150
AX152492/c
LOCUS AX152492 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 407 from Patent WO0138577.
ACCESSION AX152492
VERSION AX152492.1 GI:14534143
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE
1 Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
AUTHORS Human transcriptomes
TITLE Patent: WO 0138577-A 407 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)
FEATURES
source
1. .10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 46.3%; Score 7.4; DB 1; Length 10;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGGCGGCAT 14
Db 9 GGCAGCATC 1

RESULT 151
AX153403/c
LOCUS AX153403 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 1318 from Patent WO0138577.

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ACCESSION AX153403
VERSION AX153403.1 GI:14535054
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
          Homo sapiens
REFERENCE 1
AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcripts
JOURNAL Patent: WO 0138577-A 1318 31-MAY-2001;
          The Johns Hopkins University (US)
FEATURES
source 1. .10
        Location/Qualifiers
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGGCGGC 11
Db 10 GCCGGCGGC 2

RESULT 152
AX153431
LOCUS AX153431
DEFINITION Sequence 1346 from Patent WO0138577.
ACCESSION AX153431
VERSION AX153431.1 GI:14535082
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Hominidae; Homo.
REFERENCE 1
AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcripts
JOURNAL Patent: WO 0138577-A 1346 31-MAY-2001;
          The Johns Hopkins University (US)
FEATURES
source 1. .10
        Location/Qualifiers
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGGCGGC 11
Db 10 GCCGGCGGC 2

RESULT 153
AX153549/c
LOCUS AX153549/c
DEFINITION Sequence 1464 from Patent WO0138577.
ACCESSION AX153549
VERSION AX153549.1 GI:14535200
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Hominidae; Homo.
REFERENCE 1
AUTHORS Versteeg,R. and Caron,H.N.
TITLE Myc targets
JOURNAL Patent: WO 0185941-A 22 15-NOV-2001;
          Academisch Ziekenhuis bij de Universiteit van Amsterdam (NL)
FEATURES
source 1. .10
        Location/Qualifiers
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"

ACCESSION AX153403
VERSION AX153403.1 GI:14535054
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
          Homo sapiens
REFERENCE 1
AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcripts
JOURNAL Patent: WO 0138577-A 1464 31-MAY-2001;
          The Johns Hopkins University (US)
FEATURES
source 1. .10
        Location/Qualifiers
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGGCGGC 11
Db 10 GCCGGCGGC 2

RESULT 154
AX153615/c
LOCUS AX153615/c
DEFINITION Sequence 1530 from Patent WO0138577.
ACCESSION AX153615
VERSION AX153615.1 GI:14535266
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Hominidae; Homo.
REFERENCE 1
AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcripts
JOURNAL Patent: WO 0138577-A 1530 31-MAY-2001;
          The Johns Hopkins University (US)
FEATURES
source 1. .10
        Location/Qualifiers
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGGCGGC 11
Db 10 GCCGGCGGC 2

RESULT 155
AX301308/c
LOCUS AX301308/c
DEFINITION Sequence 22 from Patent WO0185941.
ACCESSION AX301308
VERSION AX301308.1 GI:17382391
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Hominidae; Homo.
REFERENCE 1
AUTHORS Versteeg,R. and Caron,H.N.
TITLE Myc targets
JOURNAL Patent: WO 0185941-A 22 15-NOV-2001;
          Academisch Ziekenhuis bij de Universiteit van Amsterdam (NL)
FEATURES
source 1. .10
        Location/Qualifiers
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"

ACCESSION AX153403
VERSION AX153403.1 GI:14535054
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
          Homo sapiens
REFERENCE 1
AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcripts
JOURNAL Patent: WO 0138577-A 1346 31-MAY-2001;
          The Johns Hopkins University (US)
FEATURES
source 1. .10
        Location/Qualifiers
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CGGGCGGC 9
Db 2 CGACGGCGC 10

RESULT 153
AX153549/c
LOCUS AX153549/c
DEFINITION Sequence 1464 from Patent WO0138577.
ACCESSION AX153549
VERSION AX153549.1 GI:14535200
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Hominidae; Homo.
REFERENCE 1
AUTHORS Versteeg,R. and Caron,H.N.
TITLE Myc targets
JOURNAL Patent: WO 0185941-A 22 15-NOV-2001;
          Academisch Ziekenhuis bij de Universiteit van Amsterdam (NL)
FEATURES
source 1. .10
        Location/Qualifiers
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"
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Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches      8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      6 GCGGCATC 14
      ||| |||||
Db      9 GGCAGCATC 1

RESULT 156
AX301310/c
LOCUS      AX301310
DEFINITION Sequence 24 from Patent WO0185941.
ACCESSION  AX301310
VERSION     AX301310.1 GI:17382393
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
REFERENCE   1
AUTHORS     Versteeg,R. and Caron,H.N.
TITLE       Myc targets
JOURNAL     Patent: WO 0185941-A 24 15-NOV-2001;
            Academisch Ziekenhuis bij de Universiteit van Amsterdam (NL)
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="Homo sapiens"
            /mol_type="unassigned DNA"
            /db_xref="taxon:9606"

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches      8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      3 GCGGGCGC 11
      || |||||
Db     10 GCCGGCGC 2

RESULT 157
AX667835
LOCUS      AX667835
DEFINITION Sequence 1284 from Patent WO0242459.
ACCESSION  AX667835
VERSION     AX667835.1 GI:29291372
KEYWORDS    .
SOURCE      synthetic construct
            synthetic construct
            other sequences; artificial sequences.
ORGANISM    Liu,Q.
            Position dependent recognition of gnn nucleotide triplets by zinc
            fingers
            Patent: WO 0242459-A 1284 30-MAY-2002;
            Sangamo Biosciences Inc. (US)
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="example target DNA"

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches      8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      7 GCGGCATCG 15
      ||||| |||
Db      1 GCGGCGTCG 9

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RESULT 158
AX924169/c
LOCUS      AX924169
DEFINITION Sequence 26 from Patent WO03080660.
ACCESSION  AX924169
VERSION     AX924169.1 GI:40217140
KEYWORDS    .
SOURCE      synthetic construct
            synthetic construct
            other sequences; artificial sequences.
ORGANISM    Woeldike,H.F.
            Method for the preparation of recombinant mammalian heparin-binding
            protein (hbp)
            Patent: WO 03080660-A 26 02-OCT-2003;
            Leukotech A/S (DK)
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="PCR primer 4816"

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches      8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      1 CGCGCGCGC 9
      ||||| |
Db      9 CGCGCGGTG 1

RESULT 159
BD008037/c
LOCUS      BD008037
DEFINITION LPS activated human monocyte expressing genes.
ACCESSION  BD008037
VERSION     BD008037.1 GI:18636410
KEYWORDS    JP 2001069993-A/313.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
            Hominiidae; Homo.
            1 (bases 1 to 10)
            Matsushima,K., Hashimoto,S. and Suzuki,T.
            LPS activated human monocyte expressing genes
            Patent: JP 2001069993-A 313 21-MAR-2001;
            JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT     OS Homo sapiens (human)
            PN JP 2001069993-A/313
            PD 21-MAR-2001
            PF 28-APR-2000 JP 2000131079
            PR
            PI KOJI MATSUSHIMA,SHINICHI HASHIMOTO,TAKUJI SUZUKI PC
            C12N15/09,C07K14/47,C07K16/18,G01N33/50,G01N33/53//A61K45/00, PC
            A61P29/00,
            PC A61P31/00,C12P21/08,C12N15/00
            CC
            FH Key Location/Qualifiers
            FT source 1..10
            FT /organism='Homo sapiens (human)'.
            FEATURES
            source
            1..10
            /organism="Homo sapiens"
            /mol_type="genomic DNA"
            /db_xref="taxon:9606"

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 77;
Matches      8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy 3 GCGGCGGC 11
Db 10 GCGGCGGC 2

RESULT 160
LOCUS AR036558 10 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 11 from patent US 5872235.
ACCESSION AR036558
VERSION AR036558.1 GI:5953226
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 10)
AUTHORS Chen L.Bo., Bao S. and Liu,Y.
TITLE Nucleic acids encoding tumor marker
JOURNAL Patent: US 5872235-A 11 16-FEB-1999;
FEATURES
    source
        1..10
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCGCGGG 7
Db 10 CCGCGGG 4

RESULT 161
LOCUS AR044891 10 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 45 from patent US 5817759.
ACCESSION AR044891
VERSION AR044891.1 GI:5966356
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 10)
AUTHORS Margolskee,R.F.
TITLE Gustducin polypeptides and fragments
JOURNAL Patent: US 5817759-A 45 06-OCT-1998;
FEATURES
    source
        1..10
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCGCGGG 7
Db 10 CCGCGGG 4

RESULT 162
LOCUS AR069259 10 bp DNA linear PAT 18-FEB-2000
DEFINITION Sequence 34 from patent US 5891628.
ACCESSION AR069259
VERSION AR069259.1 GI:7220147
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 10)
AUTHORS Readers,S., Schneider,M. and Glucksmann,M.Alexandra.

TITLE Identification of polycystic kidney disease gene, diagnostics and
treatment
JOURNAL Patent: US 5891628-A 34 06-APR-1999;
FEATURES
    source
        1..10
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 10 GCATCGT 16
Db 10 GCATCGT 4

RESULT 163
LOCUS AR096456 10 bp DNA linear PAT 08-SEP-2000
DEFINITION Sequence 45 from patent US 6008000.
ACCESSION AR096456
VERSION AR096456.1 GI:10025273
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 10)
AUTHORS Margolskee,R.F.
TITLE Gustducin materials and methods
JOURNAL Patent: US 6008000-A 45 28-DEC-1999;
FEATURES
    source
        1..10
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 GGGCGGC 11
Db 1 GGGCGGC 7

RESULT 164
LOCUS AR107342 10 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 31 from patent US 6109776.
ACCESSION AR107342
VERSION AR107342.1 GI:12822829
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 10)
AUTHORS Haas,J.
TITLE Method and system for computationally identifying clusters within a
set of sequences
JOURNAL Patent: US 6109776-A 31 29-AUG-2000;
FEATURES
    source
        1..10
        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 10 GCATCGT 16
Db 9 GCATCGT 3

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RESULT 165
AR161932/c
LOCUS          AR161932          10 bp      DNA          linear          PAT 17-OCT-2001
DEFINITION     Sequence 5 from patent US 6258537.
ACCESSION      AR161932
VERSION        AR161932.1  GI:16228963
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 10)
AUTHORS        Keinath,A.P., Somai,B.M. and Dean,R.A.
TITLE          Method of diagnosing gummy stem blight in plants using a polymerase
JOURNAL        chain reaction assay
PATENT         Patent: US 6258537-A 5 10-JUL-2001;
FEATURES       Location/Qualifiers
                1..10
                /organism="unknown"
                /mol_type="unassigned DNA"
Query Match    43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches        7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY             7 GCGGCAT 13
DB             8 GCGGCAT 2

RESULT 166
AR135595
LOCUS          BD135595          10 bp      DNA          linear          PAT 18-SEP-2002
DEFINITION     Observation alley for expression of cancer-related gene.
ACCESSION      BD135595
VERSION        BD135595.1  GI:23230540
KEYWORDS       JP 2002058495-A/3.
SOURCE         synthetic construct
ORGANISM       synthetic construct
REFERENCE      1 (bases 1 to 10)
AUTHORS        Tomita,H., Saito,T., Narahara,M. and Kato,K.
TITLE          Observation alley for expression of cancer-related gene
JOURNAL        Patent: JP 2002058495-A 3 26-FEB-2002;
COMMENT        HITACHI LTD
                OS   Artificial Sequence
                PN   JP 2002058495-A/3
                PD   26-FEB-2002
                PF   22-AUG-2000 JP 200255737
                PI   HIROYUKI TOMITA,TOSHIRO SAITO,MASATOSHI NARAHARA,KOICHI KATO
                PC   C12N15/09,C12M1/00,C12Q1/68,G01N33/53,G01N33/566,G01N33/574,
                PC   G01N35/02,
                PC   G01N37/00,C12N15/00
                CC   Description of Artificial Sequence:A miniheirpin motif FH
                Key   Location/Qualifiers
                FT   source 1..10
                FT   /organism='Artificial Sequence'.
FEATURES       Location/Qualifiers
                1..10
                /organism="synthetic construct"
                /mol_type="genomic DNA"
                /db_xref="taxon:32630"
Query Match    43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches        7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY             5 GCGCGGC 11
DB             1 GCGCGGC 7

RESULT 167

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BD161421/c
LOCUS          BD161421          10 bp      DNA          linear          PAT 17-JAN-2003
DEFINITION     Human activated Th1 and Th2 cell expression genes.
ACCESSION      BD161421
VERSION        BD161421.1  GI:27867179
KEYWORDS       JP 2002186482-A/243.
SOURCE         Homo sapiens (human)
ORGANISM       Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
REFERENCE      1 (bases 1 to 10)
AUTHORS        Nagai,S., Matsushima,K. and Hashimoto,S.
TITLE          Human activated Th1 and Th2 cell expression genes
JOURNAL        Patent: JP 2002186482-A 243 02-JUL-2002;
                JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT        OS   Homo sapiens (human)
                PN   JP 2002186482-A/243
                PD   02-JUL-2002
                PF   19-DEC-2000 JP 2000385816
                PI   SHIGENORI NAGAI,KOJI MATSUSHIMA,SHINICHI HASHIMOTO PC
                C12N15/09,C07K14/47,C07K16/18,C12P21/08,C12N15/00 CC Human
                activated Th1 and Th2 cell expression genes FH Key
                Location/Qualifiers
                FT   source 1..10
                FT   /organism='Homo sapiens (human)'.
FEATURES       Location/Qualifiers
                1..10
                /organism="Homo sapiens"
                /mol_type="genomic DNA"
                /db_xref="taxon:9606"
Query Match    43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches        7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY             8 CGGCATC 14
DB             10 CGGCATC 4

RESULT 168
BD166500/c
LOCUS          BD166500          10 bp      DNA          linear          PAT 17-JAN-2003
DEFINITION     Human liver disease-expressing genes.
ACCESSION      BD166500
VERSION        BD166500.1  GI:27872312
KEYWORDS       JP 2002209591-A/45.
SOURCE         unidentified
ORGANISM       unidentified.
REFERENCE      1 (bases 1 to 10)
AUTHORS        Matsushima,K., Hashimoto,S., Kaneko,S. and Yamashita,T.
TITLE          Human liver disease-expressing genes
JOURNAL        Patent: JP 2002209591-A 45 30-JUL-2002;
                JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT        OS   Homo sapiens (human)
                PN   JP 2002209591-A/45
                PD   30-JUL-2002
                PF   19-JAN-2001 JP 2001012328
                PI   KOJI MATSUSHIMA,SHINICHI HASHIMOTO,SHUICHI KANEKO,TARO PI
                YAMASHITA
                PC   C12N15/09,C07K14/47,C07K16/18,G01N33/15,G01N33/50//C12P21/02,
                PC   C12P21/08,
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Query Match      43.8%; Score 7; DB 1; Length 10;
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Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGCGGGG 7
Db 8 CGCGGGG 2

RESULT 169
BD166712/c
LOCUS      BD166712
DEFINITION Human liver disease-expressing genes.
ACCESSION  BD166712
VERSION    BD166712.1 GI:27872524
KEYWORDS  JP 2002209591-A/257.
SOURCE    unidentified
ORGANISM  unclassified.
REFERENCE  1 (bases 1 to 10)
AUTHORS   Matsushima K., Hashimoto, S., Kaneko, S. and Yamashita, T.
TITLE     Human liver disease-expressing genes
JOURNAL   Patent: JP 2002209591-A 257 30-JUL-2002;
          JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT   OS Homo sapiens (human)
          PN JP 2002209591-A/257
          PD 30-JUL-2002
          PP 19-JAN-2001 JP 2001012328
          PI KOJI MATSUSHIMA, SHINICHI HASHIMOTO, SHUICHI KANEKO, TARO
            YAMASHITA
          PC C12N15/09, C07K14/47, C07K16/18, G01N33/15, G01N33/50, G01N33/53, G01N33/566, PC
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Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGCGGGG 7
Db 8 CGCGGGG 2

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Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
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Qy 1 CGCGGGG 7
Db 8 CGCGGGG 2

RESULT 170
BD238593/c
LOCUS      BD238593
DEFINITION Preparation and use of superior vaccines.
ACCESSION  BD238593
VERSION    BD238593.1 GI:33048363
KEYWORDS  JP 2002534056-A/11.
SOURCE    Homo sapiens (human)
ORGANISM  Homo sapiens
REFERENCE  1 (bases 1 to 10)
AUTHORS   Roberts, B.L. and Shankara, S.
TITLE     Preparation and use of superior vaccines
JOURNAL   Patent: JP 2002534056-A 11 15-OCT-2002;
          GENZYME CORP
COMMENT   OS Homo sapiens (human)
          PN JP 2002534056-A/11
          PD 15-OCT-2002
          PP 18-JUN-1999 JP 2000554749
          PR 19-JUN-1998 US 60/090039, 19-JUN-1998 US 60/090040 PR
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            08-DEC-1998 US 60/111715
          PI BRUCE L ROBERTS, SRINIVAS SHANKARA
          PC C12N15/09, C12N15/10, A61K39/00, A61P35/00, A61P37/04, C12N1/15, PC
            C12N1/19,
          PC C12N1/21, C12N5/10, G01N33/15, G01N33/50, G01N33/53, G01N33/566, PC
            G01N37/00,
          PC C12N15/00, C12N5/00, C12N15/00
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Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
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Qy 1 CGCGGGG 7
Db 8 CGCGGGG 2

RESULT 171
BD239023/c
LOCUS      BD239023
DEFINITION Preparation and use of superior vaccines.
ACCESSION  BD239023
VERSION    BD239023.1 GI:33048793
KEYWORDS  JP 2002534056-A/441.
SOURCE    Homo sapiens (human)
ORGANISM  Homo sapiens
REFERENCE  1 (bases 1 to 10)
AUTHORS   Roberts, B.L. and Shankara, S.
TITLE     Preparation and use of superior vaccines
JOURNAL   Patent: JP 2002534056-A 441 15-OCT-2002;
          GENZYME CORP
COMMENT   OS Homo sapiens (human)
          PN JP 2002534056-A/441
          PD 15-OCT-2002
          PP 18-JUN-1999 JP 2000554749
          PR 19-JUN-1998 US 60/090039, 19-JUN-1998 US 60/090040 PR
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08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS, SRINIVAS SHANKARA
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C12N1/19,
PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
G01N37/00,
PC C12N15/00,C12N5/00,C12N15/00
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Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 GCGGCAT 13
DB 8 GCGGCAT 2

RESULT 172
BD239437/C
LOCUS
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD239437
VERSION BD239437.1 GI:33049207
KEYWORDS JP 2002534056-A/855.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
Robert, B.L. and Shankara, S.
AUTHORS
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 855 15-OCT-2002;
GENZYME CORP
COMMENT
OS Homo sapiens (human)
PN JP 2002534056-A/855
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
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PI BRUCE L ROBERTS, SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
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PC C12N1/21,C12N5/10,G01N33/15,G01N33/50,G01N33/53,G01N33/566, PC
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PC C12N15/00,C12N5/00,C12N15/00
CC Preparation and use of superior vaccines
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Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 GCGGCAT 13
DB 8 GCGGCAT 2

RESULT 173
BD240050
LOCUS
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD240050
VERSION BD240050.1 GI:33049820
KEYWORDS JP 2002534056-A/1468.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
Robert, B.L. and Shankara, S.
AUTHORS
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 1468 15-OCT-2002;
GENZYME CORP
COMMENT
OS Homo sapiens (human)
PN JP 2002534056-A/1468
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
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08-DEC-1998 US 60/111715
PI BRUCE L ROBERTS, SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15, PC
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Query Match 43.8%; Score 7; DB 1; Length 10;
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QY 5 GGGCGGC 11
DB 10 GGGCGGC 4

RESULT 174
BD240050
LOCUS
DEFINITION Preparation and use of superior vaccines.
ACCESSION BD240050
VERSION BD240050.1 GI:33049820
KEYWORDS JP 2002534056-A/1468.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 10)
Robert, B.L. and Shankara, S.
AUTHORS
TITLE Preparation and use of superior vaccines
JOURNAL Patent: JP 2002534056-A 1468 15-OCT-2002;
GENZYME CORP
COMMENT
OS Homo sapiens (human)
PN JP 2002534056-A/1468
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
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PI BRUCE L ROBERTS, SRINIVAS SHANKARA
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Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      3 GCGGCG 9
Db      3 GCGGCG 9

RESULT 174
BD240098/c
LOCUS      10 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Preparation and use of superior vaccines.
ACCESSION  BD240098
VERSION     BD240098.1 GI:33049868
KEYWORDS   JP 2002534056-A/1516.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens

REFERENCE
AUTHORS    Roberts,B.L. and Shankara,S.
TITLE      Preparation and use of superior vaccines
JOURNAL    Patent: JP 2002534056-A 1516 15-OCT-2002;
GENZYME CORP

COMMENT
OS Homo sapiens (human)
PN JP 2002534056-A/1516
PD 15-OCT-2002
PF 18-JUN-1999 JP 2000554749
PR 19-JUN-1998 US 60/090039,19-JUN-1998 US 60/090040 PR
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PI BRUCE L ROBERTS,SRINIVAS SHANKARA
PC C12N15/09,C12N15/09,A61K39/00,A61P35/00,A61P37/04,C12N1/15,PC
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PC C12N15/00,C12N5/00,C12N15/00
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FEATURES
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Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 GCGGCG 7
Db      8 GCGGCG 2

RESULT 176
CQ986656
LOCUS      10 bp      DNA      linear      PAT 25-JAN-2005
DEFINITION Sequence 200 from Patent WO2005001142.
ACCESSION  CQ986656
VERSION     CQ986656.1 GI:58194573
KEYWORDS   .
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens

REFERENCE
AUTHORS    Lofton-Day,C., Sledziewski,A., Thomas,J., Day,R.W.,
Tonnes-Priddy,L. and Cardon,K.
TITLE      Methods and nucleic acids for the analysis of colorectal cell
proliferative disorders
JOURNAL    Patent: WO 2005001142-A 200 06-JAN-2005;

Qy      6 GCGGCG 12
Db      8 GCGGCG 2

RESULT 175
BD240706/c
LOCUS      10 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Preparation and use of superior vaccines.
ACCESSION  BD240706
VERSION     BD240706.1 GI:33050476

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FEATURES             Location/Qualifiers
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Query Match          43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GCGCGGC 11
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RESULT 177
CS114174
LOCUS             10 bp      DNA      linear      PAT 24-JUN-2005
DEFINITION       Sequence 932 from Patent WO2005054517.
ACCESSION        CS114174
VERSION          CS114174.1 GI:68225719
KEYWORDS         synthetic construct
SOURCE           other sequences; artificial sequences.
ORGANISM         1
REFERENCE        Day,K.J., Cottrell,S., Distler,J., Morotti,A., Yamamura,S.,
AUTHORS          Dekker,S., Ocamp,Y. and Devos,T.
TITLE            Methods and nucleic acids for the analysis of gene expression
                associated with the development of prostate cell proliferative
                disorders
JOURNAL          Patent: WO 2005054517-A 932 16-JUN-2005;
Epigenomics AG (DE)
FEATURES             Location/Qualifiers
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     /db_xref="taxon:32630"
     /note="chemically treated genomic DNA (Homo sapiens)"

Query Match          43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GCGCGGC 11
    |||||
Db 4 GCGCGGC 10

RESULT 178
E32445
LOCUS             10 bp      DNA      linear      PAT 18-JUN-2001
DEFINITION       Mammal-derived tissue specific physiologically active protein.
ACCESSION        E32445
VERSION          E32445.1 GI:13018681
KEYWORDS         JP 2000037190-A/5.
SOURCE           synthetic construct
ORGANISM         other sequences; artificial sequences.
REFERENCE        1 (bases 1 to 10)
AUTHORS          Jun,N., Ysuke,N. and Toshihiro,T.
TITLE            Mammal-derived tissue specific physiologically active protein
JOURNAL          Patent: JP 2000037190-A 5 08-FEB-2000;
                JAPAN TOBACCO INC
COMMENT          OS Artificial Sequence
                PN JP 2000037190-A/5
                PD 08-FEB-2000
                PF 23-JUL-1998 JP 1998225228
                PR JUN NISHIU,YUSUKE NAKAMURA,TOSHIHIRO TANAKA
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                C12N15/02,

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PC C12P21/02,C12P21/08//(C12N5/10,C12R1:91),(C12P21/08,C12R1:91),
PC C12N15/00,
PC C12N5/00,C12N15/00,(C12N5/00,C12R1:91)
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FEATURES             Location/Qualifiers
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Query Match          43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 10 GCATCGT 16
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Db 1 GCATCGT 7

RESULT 179
E39744
LOCUS             10 bp      DNA      linear      PAT 31-JAN-2002
DEFINITION       Genes with human dendritic cell expression.
ACCESSION        E39744
VERSION          E39744.1 GI:18621835
KEYWORDS         JP 2000279181-A/277.
SOURCE           Homo sapiens (human)
ORGANISM         Homo sapiens
                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                Homnidae; Homo.
REFERENCE        1 (bases 1 to 10)
AUTHORS          Hashimoto,S., Matsushima,K. and Suzuki,T.
TITLE            Genes with human dendritic cell expression
JOURNAL          Patent: JP 2000279181-A 277 10-OCT-2000;
                SCIENCE & TECH AGENCY
COMMENT          OS Homo sapiens (human)
                PN JP 2000279181-A/277
                PD 10-OCT-2000
                PF 01-APR-1999 JP 1999095481
                PR SHINICHI HASHIMOTO,KOJI MATSUSHIMA,TAKUJI SUZUKI PC
                C12N15/09,C07K14/475,C07K16/18,C12N15/00
                CC
                FH Key Location/Qualifiers
                FT source 1..10
                /organism='Homo sapiens (human)'.
FEATURES             Location/Qualifiers
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     1..10
     /organism="Homo sapiens"
     /mol_type="genomic DNA"
     /db_xref="taxon:9606"

Query Match          43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCGC 9
    |||||
Db 3 GCGGCGC 9

RESULT 180
I74373
LOCUS             10 bp      DNA      linear      PAT 03-APR-1998
DEFINITION       Sequence 36 from patent US 5688662.
ACCESSION        I74373
VERSION          I74373.1 GI:3010514
KEYWORDS         .
SOURCE           Unknown.
ORGANISM         Unknown.

```

```

Unclassified.
REFERENCE
1 (bases 1 to 10)
AUTHORS
Margolske, R.F.
TITLE
Gustducin polynucleotides, vectors, host cells and recombinant
methods
JOURNAL
Patent: US 5688662-A 36 18-NOV-1997;
FEATURES
source
Location/Qualifiers
1..10
/organism="unknown"
/mol_type="unassigned DNA"

Query Match
43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGC GGCG 11
| | | | |
Db 1 GGC GGCG 7

RESULT 181
AR303501
LOCUS
Sequence 226 from patent US 6544736.
ACCESSION
AR303501
VERSION
AR303501.1 GI:31692277
KEYWORDS
SOURCE
Unknown.
ORGANISM
Unclassified.
REFERENCE
1 (bases 1 to 10)
AUTHORS
Shimamoto, A., Furuichi, Y., Shibata, Y., Funaki, H., Ohara, E. and
Watahiki, M.
TITLE
Method for synthesizing cDNA from mRNA sample
JOURNAL
Patent: US 6544736-A 226 08-APR-2003;
Nippon Gene Co., Ltd. and Agene Research Institute Co., Ltd.;
Tokyo;
JPX;
FEATURES
source
Location/Qualifiers
1..10
/organism="unknown"
/mol_type="genomic DNA"

Query Match
43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 GGCATCG 15
| | | | |
Db 4 GGCATCG 10

RESULT 182
AR351835
LOCUS
Sequence 1640 from patent US 6588746.
ACCESSION
AR351835
VERSION
AR351835.1 GI:33753631
KEYWORDS
SOURCE
Unknown.
ORGANISM
Unclassified.
REFERENCE
1 (bases 1 to 10)
AUTHORS
Dobrinde, D. and Fischer, U.
TITLE
Device for generating an offset of transported flexible sheet
JOURNAL
Patent: US 6588746-A 1640 08-JUL-2003;
NextPress Solutions LLC; Rochester, NY;
DEX;
FEATURES
source
Location/Qualifiers
1..10
/organism="unknown"
/mol_type="genomic DNA"

Unclassified.
REFERENCE
1 (bases 1 to 10)
AUTHORS
Keinath, A.P., Somai, B.M. and Dean, R.A.
TITLE
Method of diagnosing gummy stem blight in plants using a polymerase
chain reaction assay
JOURNAL
Patent: US 6610487-A 5 26-AUG-2003;
Clemson University; Clemson, SC
FEATURES
source
Location/Qualifiers
1..10
/organism="unknown"
/mol_type="unassigned DNA"

Query Match
43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 GCGGCAT 13
| | | | |
Db 8 GCGGCAT 2

RESULT 185
AR610721

```

```

Query Match
43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 GCGGGCA 12
| | | | |
Db 3 GCGGGCA 9

RESULT 183
AR351836
LOCUS
Sequence 1641 from patent US 6588746.
ACCESSION
AR351836
VERSION
AR351836.1 GI:33753632
KEYWORDS
SOURCE
Unknown.
ORGANISM
Unclassified.
REFERENCE
1 (bases 1 to 10)
AUTHORS
Dobrinde, D. and Fischer, U.
TITLE
Device for generating an offset of transported flexible sheet
JOURNAL
Patent: US 6588746-A 1641 08-JUL-2003;
NextPress Solutions LLC; Rochester, NY;
DEX;
FEATURES
source
Location/Qualifiers
1..10
/organism="unknown"
/mol_type="genomic DNA"

Query Match
43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 GCGGGCA 12
| | | | |
Db 3 GCGGGCA 9

RESULT 184
AR382218/c
LOCUS
Sequence 5 from patent US 6610487.
ACCESSION
AR382218
VERSION
AR382218.1 GI:40090630
KEYWORDS
SOURCE
Unknown.
ORGANISM
Unclassified.
REFERENCE
1 (bases 1 to 10)
AUTHORS
Keinath, A.P., Somai, B.M. and Dean, R.A.
TITLE
Method of diagnosing gummy stem blight in plants using a polymerase
chain reaction assay
JOURNAL
Patent: US 6610487-A 5 26-AUG-2003;
Clemson University; Clemson, SC
FEATURES
source
Location/Qualifiers
1..10
/organism="unknown"
/mol_type="unassigned DNA"

Query Match
43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 GCGGCAT 13
| | | | |
Db 8 GCGGCAT 2

RESULT 185
AR610721

```

```
LOCUS       AR610721               10 bp      DNA          linear      PAT 15-DEC-2004
DEFINITION   Sequence 843 from patent US 6825174.
ACCESSION   AR610721
VERSION     AR610721.1  GI:56666197
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Nyce,J.W.
TITLE       Composition, formulations & method for prevention & treatment of
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL     Patent: US 6825174-A 843 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES    Location/Qualifiers
             source
               1..10
               /organism="unknown"
               /mol_type="genomic DNA"

Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches          7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GCGGGGC 8
        |||||
Db      4 GCGGGGC 10

RESULT 186
LOCUS       AR610732               10 bp      DNA          linear      PAT 15-DEC-2004
DEFINITION   Sequence 854 from patent US 6825174.
ACCESSION   AR610732
VERSION     AR610732.1  GI:56666208
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Nyce,J.W.
TITLE       Composition, formulations & method for prevention & treatment of
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL     Patent: US 6825174-A 854 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES    Location/Qualifiers
             source
               1..10
               /organism="unknown"
               /mol_type="genomic DNA"

Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches          7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GCGGGGC 8
        |||||
Db      4 GCGGGGC 10

RESULT 187
LOCUS       AR610742               10 bp      DNA          linear      PAT 15-DEC-2004
DEFINITION   Sequence 864 from patent US 6825174.
ACCESSION   AR610742
VERSION     AR610742.1  GI:56666218
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Nyce,J.W.
TITLE       Composition, formulations & method for prevention & treatment of
```

```
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL     Patent: US 6825174-A 864 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES    Location/Qualifiers
             source
               1..10
               /organism="unknown"
               /mol_type="genomic DNA"

Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches          7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GCGGGGC 8
        |||||
Db      2 GCGGGGC 8

RESULT 188
LOCUS       AR610751               10 bp      DNA          linear      PAT 15-DEC-2004
DEFINITION   Sequence 873 from patent US 6825174.
ACCESSION   AR610751
VERSION     AR610751.1  GI:56666227
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 10)
AUTHORS     Nyce,J.W.
TITLE       Composition, formulations & method for prevention & treatment of
           diseases and conditions associated with bronchoconstriction,
           allergy(ies) & inflammation
JOURNAL     Patent: US 6825174-A 873 30-NOV-2004;
           East Carolina University; Greenville, NC
FEATURES    Location/Qualifiers
             source
               1..10
               /organism="unknown"
               /mol_type="genomic DNA"

Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches          7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GCGGGGC 8
        |||||
Db      1 GCGGGGC 7

RESULT 189
LOCUS       AX152452/c              10 bp      DNA          linear      PAT 22-JUN-2001
DEFINITION   Sequence 367 from Patent WO0138577.
ACCESSION   AX152452
VERSION     AX152452.1  GI:14534103
KEYWORDS    .
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
           Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
           Homnidae; Homo.
REFERENCE   1
AUTHORS     Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE       Human transcriptomes
JOURNAL     Patent: WO 0138577-A 367 31-MAY-2001;
           The Johns Hopkins University (US)
FEATURES    Location/Qualifiers
             source
               1..10
               /organism="Homo sapiens"
               /mol_type="unassigned DNA"
               /db_xref="taxon:9606"

Query Match      43.8%; Score 7; DB 1; Length 10;
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```

Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 CGGCATC 14
    |||||
Db 10 CGGCATC 4

RESULT 190
AX152469/c
LOCUS AX152469 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 384 from Patent WO0138577.
ACCESSION AX152469
VERSION AX152469.1 GI:14534120
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Homnidae; Homo.
REFERENCE
1 Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
AUTHORS Human transcriptomes
TITLE Patent: WO 0138577-A 384 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)
FEATURES
source
1..10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGGC 8
    |||||
Db 7 GCGGGGC 1

RESULT 191
AX153008
LOCUS AX153008 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 923 from Patent WO0138577.
ACCESSION AX153008
VERSION AX153008.1 GI:14534659
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Homnidae; Homo.
REFERENCE
1 Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
AUTHORS Human transcriptomes
TITLE Patent: WO 0138577-A 923 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)
FEATURES
source
1..10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGGC 8
    |||||
Db 7 GCGGGGC 1

RESULT 192
AX153008
LOCUS AX153008 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 923 from Patent WO0138577.
ACCESSION AX153008
VERSION AX153008.1 GI:14534659
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Homnidae; Homo.
REFERENCE
1 Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
AUTHORS Human transcriptomes
TITLE Patent: WO 0138577-A 923 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)
FEATURES
source
1..10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGGC 8
    |||||
Db 3 GCGGGGC 9

RESULT 193
AX153023/c
LOCUS AX153023 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 938 from Patent WO0138577.
ACCESSION AX153023
VERSION AX153023.1 GI:14534674
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
          Homnidae; Homo.
REFERENCE
1 Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
AUTHORS Human transcriptomes
TITLE Patent: WO 0138577-A 938 31-MAY-2001;
JOURNAL The Johns Hopkins University (US)
FEATURES
source
1..10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGGC 8
    |||||
Db 3 GCGGGGC 9

RESULT 194
AX153205/c
LOCUS AX153205 10 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 1120 from Patent WO0138577.
ACCESSION AX153205
VERSION AX153205.1 GI:14534856
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

```

Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.

REFERENCE

AUTHORS Velculescu,V.E., Vogelstein,B. and Kinzler,K.W.
TITLE Human transcriptomes
JOURNAL Patent: WO 0138577-A 1120 31-MAY-2001;
The Johns Hopkins University (US)

FEATURES

source
1. .10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GCGCGGC 11

Db 7 GCGCGGC 1
|||||

RESULT 195

AX301476/c AX301476 10 bp DNA linear PAT 30-NOV-2001
LOCUS Sequence 190 from Patent WO0185941.
DEFINITION AX301476

ACCESSION AX301476
VERSION AX301476.1 GI:17382559

KEYWORDS Homo sapiens (human)

SOURCE

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.

REFERENCE

AUTHORS Versteeg,R. and Caron,H.N.
TITLE Myc targets
JOURNAL Patent: WO 0185941-A 190 15-NOV-2001;
Academisch Ziekenhuis bij de Universiteit van Amsterdam (NL)

FEATURES

source
1. .10
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8 CGGCATC 14

Db 10 CGGCATC 4
|||||

RESULT 196

AX377358 AX377358 10 bp DNA linear PAT 18-MAR-2002
LOCUS Sequence 22 from Patent WO0212499.
DEFINITION AX377358

ACCESSION AX377358
VERSION AX377358.1 GI:19573644

KEYWORDS Homo sapiens (human)

SOURCE

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.

REFERENCE

AUTHORS Kliem,S.E., Koshy,B. and Lanz,E.M.
TITLE Haplotypes of the ntfs gene
JOURNAL Patent: WO 0212499-A 22 14-FEB-2002;
Genaisance Pharmaceuticals, Inc. (US)

FEATURES

source
1. .10
Location/Qualifiers

/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGC 8

Db 4 GCGCGGC 10
|||||

RESULT 197

AX668191 AX668191 10 bp DNA linear PAT 26-MAR-2003
LOCUS Sequence 1640 from Patent WO0242459.
DEFINITION AX668191

ACCESSION AX668191
VERSION AX668191.1 GI:29291470

KEYWORDS synthetic construct

SOURCE

ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE

AUTHORS Liu,Q.
TITLE Position dependent recognition of gnn nucleotide triplets by zinc fingers
JOURNAL Patent: WO 0242459-A 1640 30-MAY-2002;
Sangamo Biosciences Inc. (US)

FEATURES

source
1. .10
Location/Qualifiers
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="example target DNA"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 GCGCGCA 12

Db 3 GCGCGCA 9
|||||

RESULT 198

AX668192 AX668192 10 bp DNA linear PAT 26-MAR-2003
LOCUS Sequence 1641 from Patent WO0242459.
DEFINITION AX668192

ACCESSION AX668192
VERSION AX668192.1 GI:29291471

KEYWORDS synthetic construct

SOURCE

ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE

AUTHORS Liu,Q.
TITLE Position dependent recognition of gnn nucleotide triplets by zinc fingers
JOURNAL Patent: WO 0242459-A 1641 30-MAY-2002;
Sangamo Biosciences Inc. (US)

FEATURES

source
1. .10
Location/Qualifiers
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="example target DNA"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 GCGCGCA 12

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Db          3 GCGCGCA 9
|||||
RESULT 199
AX814775
LOCUS      AX814775                10 bp  DNA    linear    PAT 05-DEC-2003
DEFINITION Sequence 21 from Patent WO03064701.
ACCESSION  AX814775
VERSION     AX814775.1 GI:39103969
KEYWORDS   .
SOURCE     synthetic construct
           synthetic construct
           other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Sledziewski,A. and Schweikhardt,R.G.
TITLE      Method for the analysis of cytosine methylation patterns
JOURNAL    Patent: WO 03064701-A 21 07-AUG-2003;
           Epigenomics AG (DE)
FEATURES   Location/Qualifiers
            1..10
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="AP-PCR Primer CG5"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          5 GCGCGGC 11
          |||||
DB          4 GCGCGGC 10

RESULT 200
BD007985/C
LOCUS      BD007985                10 bp  DNA    linear    PAT 31-JAN-2002
DEFINITION LPS activated human monocyte expressing genes.
ACCESSION  BD007985
VERSION     BD007985.1 GI:18636358
KEYWORDS   JP 2001069993-A/261.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
           Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
           Homnidae; Homo.
REFERENCE  1 (bases 1 to 10)
AUTHORS    Matsushima,K., Hashimoto,S. and Suzuki,T.
TITLE      LPS activated human monocyte expressing genes
JOURNAL    Patent: JP 2001069993-A 262 21-MAR-2001;
           JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT    OS Homo sapiens (human)
           PN JP 2001069993-A/261
           PD 21-MAR-2001
           PF 28-APR-2000 JP 2000131079
           PR KOJI MATSUSHIMA,SHINICHI HASHIMOTO,TAKUJI SUZUKI PC
           C12N15/09,C07K14/47,C07K16/18,G01N33/50,G01N33/53//A61K45/00, PC
           A61P29/00,
           CC A61P31/00,C12P21/08,C12N15/00

FEATURES   Location/Qualifiers
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            /organism="Homo sapiens"
            /mol_type="genomic DNA"
            /db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          3 GCGGCGC 9
          |||||
DB          3 GCGGCGC 9

Search completed: May 9, 2006, 16:42:25
Job time : 0.001 secs

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          2 GCGGCGC 8
          |||||
DB          7 GCGGCGC 1

RESULT 201
BD007986
LOCUS      BD007986                10 bp  DNA    linear    PAT 31-JAN-2002
DEFINITION LPS activated human monocyte expressing genes.
ACCESSION  BD007986
VERSION     BD007986.1 GI:18636359
KEYWORDS   JP 2001069993-A/262.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
           Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
           Homnidae; Homo.
REFERENCE  1 (bases 1 to 10)
AUTHORS    Matsushima,K., Hashimoto,S. and Suzuki,T.
TITLE      LPS activated human monocyte expressing genes
JOURNAL    Patent: JP 2001069993-A 262 21-MAR-2001;
           JAPAN SCIENCE AND TECHNOLOGY CORP
COMMENT    OS Homo sapiens (human)
           PN JP 2001069993-A/262
           PD 21-MAR-2001
           PF 28-APR-2000 JP 2000131079
           PR KOJI MATSUSHIMA,SHINICHI HASHIMOTO,TAKUJI SUZUKI PC
           C12N15/09,C07K14/47,C07K16/18,G01N33/50,G01N33/53//A61K45/00, PC
           A61P29/00,
           CC A61P31/00,C12P21/08,C12N15/00

FEATURES   Location/Qualifiers
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            /organism="Homo sapiens"
            /mol_type="genomic DNA"
            /db_xref="taxon:9606"

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY          3 GCGGCGC 9
          |||||
DB          3 GCGGCGC 9

Search completed: May 9, 2006, 16:42:25
Job time : 0.001 secs

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GenCore version 5.1.8
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM nucleic - nucleic search, using sw model

Run on: May 9, 2006, 16:43:56 ; Search time 0.001 Seconds
(without alignments)
51.712 Million cell updates/sec

Title: US-09-904-968A-20-COPY
Perfect score: 16
Sequence: 1 cggcggcgccatcgt 16

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 140 seqs, 1616 residues

Total number of hits satisfying chosen parameters: 280

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 140 summaries

Database : issdb20:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	10.8	67.5	14	1	US-08-757-024-695
4	10.8	67.5	14	1	US-09-093-972C-695
5	10.8	67.5	15	1	US-08-241-372-8
C 6	10.8	67.5	15	1	US-08-241-372-9
C 7	10.8	67.5	15	1	US-08-293-150A-109
8	10.8	67.5	15	1	US-08-110-294A-2
C 9	10.8	67.5	15	1	US-08-110-294A-3
10	10.8	67.5	15	1	US-08-389-926-2
C 11	10.8	67.5	15	1	US-08-389-926-3
12	10.8	67.5	15	1	US-08-757-024-673
13	10.8	67.5	15	1	US-08-757-024-694
14	10.8	67.5	15	1	US-09-093-972C-673
15	10.8	67.5	15	1	US-09-093-972C-694
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21	10.4	65.0	13	1	US-08-757-024-696
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23	10.4	65.0	13	1	US-09-093-972C-696
24	10.4	65.0	14	1	US-08-757-024-652
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26	10.4	65.0	14	1	US-09-093-972C-652
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35	9.4	58.7	11	1	US-08-757-024-718	Sequence 718, App
36	9.4	58.7	11	1	US-08-757-024-755	Sequence 755, App
37	9.4	58.7	11	1	US-09-093-972C-698	Sequence 698, App
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C 41	9.4	58.7	12	1	US-08-431-412-68	Sequence 68, Appl
C 42	9.4	58.7	12	1	US-08-057-971-68	Sequence 68, Appl
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44	9.4	58.7	12	1	US-08-757-024-717	Sequence 717, App
45	9.4	58.7	12	1	US-08-757-024-736	Sequence 736, App
46	9.4	58.7	12	1	US-08-757-024-754	Sequence 754, App
47	9.4	58.7	12	1	US-09-093-972C-676	Sequence 676, App
48	9.4	58.7	12	1	US-09-093-972C-717	Sequence 717, App
49	9.4	58.7	12	1	US-09-093-972C-736	Sequence 736, App
50	9.4	58.7	12	1	US-09-093-972C-754	Sequence 754, App
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59	9	56.2	10	1	US-09-093-972C-756	Sequence 756, App
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C 66	8.8	55.0	12	1	PCT-US94-09318-7	Sequence 7, Appli
C 67	8.4	52.5	10	1	US-08-677-734A-7	Sequence 7, Appli
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70	8.4	52.5	10	1	US-08-757-024-773	Sequence 773, App
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C 81	8.4	52.5	11	1	US-09-563-997A-41	Sequence 41, Appli
C 82	8.4	52.5	11	1	US-09-521-195B-32	Sequence 32, Appli
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C 86	8.4	52.5	12	1	US-08-123-702-5	Sequence 5, Appli
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C 100	7.4	46.3	10	1	US-08-480-994-18	Sequence 18, Appli
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C 103	7.4	46.3	10	1	US-08-734-973-14	Sequence 14, Appli
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C 105	7.4	46.3	10	1	US-08-944-868A-18	Sequence 18, Appli
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117 7.4 46.3 10 1 US-09-875-453B-194 Sequence 194, App
118 7.4 46.3 10 1 US-07-868-353A-36 Sequence 36, Appl
119 7.4 46.3 10 1 US-08-407-804-45 Sequence 45, Appl
c 120 7.4 46.3 10 1 US-08-477-398A-11 Sequence 11, Appl
c 121 7.4 46.3 10 1 US-08-460-751-34 Sequence 34, Appl
122 7.4 46.3 10 1 US-09-124-807-45 Sequence 45, Appl
123 7.4 46.3 10 1 US-08-757-024-843 Sequence 843, App
124 7.4 46.3 10 1 US-08-757-024-854 Sequence 854, App
125 7.4 46.3 10 1 US-08-757-024-864 Sequence 864, App
126 7.4 46.3 10 1 US-08-757-024-873 Sequence 873, App
127 7.4 46.3 10 1 US-08-476-705A-8 Sequence 8, Appl
c 128 7.4 46.3 10 1 US-09-063-450-31 Sequence 31, Appl
129 7.4 46.3 10 1 US-08-631-469B-4 Sequence 4, Appl
c 130 7.4 46.3 10 1 US-09-255-432-5 Sequence 5, Appl
131 7.4 46.3 10 1 US-09-056-868B-5 Sequence 5, Appl
132 7.4 46.3 10 1 US-09-313-434C-5 Sequence 5, Appl
133 7.4 46.3 10 1 US-09-508-753B-226 Sequence 226, App
c 134 7.4 46.3 10 1 US-09-758-073-5 Sequence 5, Appl
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c 139 7.4 46.3 10 1 US-09-263-790-32 Sequence 32, Appl
c 140 7.4 46.3 10 1 US-09-721-777-14 Sequence 14, Appl

ALIGNMENTS

RESULT 1
US-09-647-344A-19/c
; Sequence 19, Application US/09647344A
; Patent No. 6586180
; GENERAL INFORMATION:
; APPLICANT: Ruffner, Duane E.
; APPLICANT: Pierce, Michael L.
; APPLICANT: Chen, Zhidong
; TITLE OF INVENTION: Directed Antisense Libraries
; FILE REFERENCE: T6678.PCT.US
; CURRENT APPLICATION NUMBER: US/09/647,344A
; CURRENT FILING DATE: 2000-12-04
; PRIOR APPLICATION NUMBER: PCT/US99/06742
; PRIOR FILING DATE: 1999-03-28
; NUMBER OF SEQ ID NOS: 50
; SEQ ID NO 19
; LENGTH: 14
; TYPE: DNA
; ORGANISM: herpes simplex virus
US-09-647-344A-19 77.5%; Score 12.4; DB 1; Length 14;
Best Local Similarity 92.9%; Pred. No. 8.1;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GCGCGGCGGCATCG 15
Db 14 GCGCGGCGGCATCG 1

RESULT 2
US-08-580-242-5
; Sequence 5, Application US/08580242
; Patent No. 5683988

; GENERAL INFORMATION:
; APPLICANT: CHUNG, Hun-Taeg
; TITLE OF INVENTION: ANTI-SENSE OLIGODEOXYNUCLEOTIDE TO
; FIBROGENIC CYTOKINE TGF-beta AND USE THEREOF
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LOWE PRICE LEBLANC & BECKER
; STREET: 99 Canal Center Plaza, Suite 300
; CITY: Alexandria
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/580,242
; FILING DATE: 28-DEC-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Mills, Demetra J.
; REGISTRATION NUMBER: 34,506
; REFERENCE/DOCKET NUMBER: 1578-004A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-684-1111
; TELEFAX: 703-684-1124
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; ANTI-SENSE: YES
US-08-580-242-5 71.2%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 14;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 CGCGCGCGGCAT 13
Db 3 CGGAGCGCGGCAT 15
RESULT 3
US-08-757-024-695
; Sequence 695, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.


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; TITLE OF INVENTION: THERAPEUTIC AGENTS VIA LIPOSOMES
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FLEHR, ROHBACH, TEST, ALBRITTON & HERBERT
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-4187
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/241,372
; FILING DATE: 09-MAY-1994
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Rowland, Bertram I
; REGISTRATION NUMBER: 20,015
; REFERENCE/DOCKET NUMBER: A-59079-1/BIR
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 781-1989
; TELEFAX: (415) 398-3249
; TELEX: 910 277299
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; US-08-241-372-9

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Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 19;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 2 GCGGGCGGCATCG 15
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Db 15 GCAGGGCGGCATGG 2

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RESULT 7
US-08-293-150A-109/c
; Sequence 109, Application US/08293150A
; Patent No. 5792629
; GENERAL INFORMATION:
; APPLICANT: MORISHITA, Hideaki
; APPLICANT: KANAMORI, Toshinori
; APPLICANT: NOBUHARA, Masahiro
; TITLE OF INVENTION: POLYPEPTIDE, DNA FRAGMENT ENCODING THE
; TITLE OF INVENTION: SAME AND PROCESS FOR PRODUCING THE SAME, AND ENZYME
; TITLE OF INVENTION: INHIBITION PROCESS, DRUG COMPOSITION AND METHODS OF
; TITLE OF INVENTION: TREATING USING THE SAME
; NUMBER OF SEQUENCES: 110
; CORRESPONDENCE ADDRESS:
; ADDRESSES: BURNS, DOANE, SWECKER & MATHIS
; STREET: P.O. Box 1404
; CITY: Alexandria
; STATE: Virginia
; COUNTRY: United States
; ZIP: 22313-1404
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/293,150A
; FILING DATE: 19-AUG-1994
; CLASSIFICATION: 514

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/791,213
; FILING DATE: 13-NOV-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 2-306745
; FILING DATE: 13-NOV-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Meuth, Donna M.
; REGISTRATION NUMBER: 36,607
; REFERENCE/DOCKET NUMBER: 029650-049
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 836-6620
; TELEFAX: (703) 836-2021
; INFORMATION FOR SEQ ID NO: 109:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-293-150A-109
; Query Match 67.5%; Score 10.8; DB 1; Length 15;
; Best Local Similarity 85.7%; Pred. No. 19;
; Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
; QY 3 GCGGGCGGCATCGT 16
; || |||||
; Db 15 GCAGGGCGGCATG 2
; || |||||
; RESULT 8
; US-08-110-294A-2
; Sequence 2, Application US/08110294A
; Patent No. 5821234
; GENERAL INFORMATION:
; APPLICANT: Drau, Victor J
; TITLE OF INVENTION: Inhibition of Proliferation of Vascular
; TITLE OF INVENTION: Smooth Muscle Cell
; NUMBER OF SEQUENCES: 49
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Allegretti & Witcoff, Ltd.
; STREET: 10 South Wacker Dr.
; CITY: Chicago
; STATE: IL
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/110,294A
; FILING DATE: 20-AUG-1993
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/063,980
; FILING DATE: 19-MAY-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/944,882
; FILING DATE: 10-SEP-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: McDonnell, John J
; REGISTRATION NUMBER: 26,949
; REFERENCE/DOCKET NUMBER: 93,510-B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-715-1000
; TELEFAX: 312-715-1234
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid

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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/389,926
FILING DATE: 16 FEB 1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/063,980
FILING DATE: 19-MAY-1993
CLASSIFICATION: 514
PRIOR APPLICATION NUMBER: US 07/944,882
FILING DATE: 10-SEP-1992
ATTORNEY/AGENT INFORMATION:
NAME: McDonnell, John J.
REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93,510-D
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
TELEFAX: 312-715-1234
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
US-08-389-926-3

Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 19;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db 15 GGAGGGCGGCATGG 2

RESULT 12
US-08-757-024-673
Sequence 673, Application US/08757024
Patent No. 6025339
GENERAL INFORMATION:
APPLICANT: Nyce, Jonathan W.
TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
NUMBER OF SEQUENCES: 952
CORRESPONDENCE ADDRESS:
ADDRESSEE: BELL, SELTZER, PARK & GIBSON
STREET: P.O. Drawer 34009
CITY: Charlotte
STATE: No. 6025339th Carolina
COUNTRY: USA
ZIP: 28234
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,024
FILING DATE: 26-NOV-1996
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Sibley, Kenneth D.
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5218-41
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
TELEFAX: 919-881-3175
INFORMATION FOR SEQ ID NO: 673:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs

TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-024-673

Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 19;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
|| |||||

Db 2 GGAGGGCGGCATGG 15

RESULT 13
US-08-757-024-694
Sequence 694, Application US/08757024
Patent No. 6025339
GENERAL INFORMATION:
APPLICANT: Nyce, Jonathan W.
TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
NUMBER OF SEQUENCES: 952
CORRESPONDENCE ADDRESS:
ADDRESSEE: BELL, SELTZER, PARK & GIBSON
STREET: P.O. Drawer 34009
CITY: Charlotte
STATE: No. 6025339th Carolina
COUNTRY: USA
ZIP: 28234
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,024
FILING DATE: 26-NOV-1996
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Sibley, Kenneth D.
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5218-41
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
TELEFAX: 919-881-3175
INFORMATION FOR SEQ ID NO: 694:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-024-694

Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 19;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
|| |||||

Db 1 GGAGGGCGGCATGG 14

RESULT 14
US-09-093-972C-673
Sequence 673, Application US/09093972C
Patent No. 6825174
GENERAL INFORMATION:
APPLICANT: Nyce, Jonathan W.
TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
& TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH

```

;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
;
; INFORMATION FOR SEQ ID NO: 673:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 673:
US-09-093-972C-673

Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 19;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
Db 2 GGAGGGCGGCATGG 15

RESULT 15
US-09-093-972C-694
; Sequence 694, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY (IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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;
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
;
; INFORMATION FOR SEQ ID NO: 694:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 694:
US-09-093-972C-694

Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 19;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
Db 1 GGAGGGCGGCATGG 14

RESULT 16
PCT-US95-05420-8
; Sequence 8, Application PC/TUS9505420
; GENERAL INFORMATION:
; APPLICANT: Dzaou, Victor J
; APPLICANT: Kaneda, Yasufumi
; TITLE OF INVENTION: METHOD FOR IN VIVO DELIVERY OF
; TITLES OF INVENTION: THERAPEUTIC AGENTS VIA LIPOSOMES
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-4187
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/05420
; FILING DATE: 28 April 1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Rowland, Bertram I
; REGISTRATION NUMBER: 20,015
; REFERENCE/DOCKET NUMBER: FP-59079-1/BIR
; TELECOMMUNICATION INFORMATION:

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/ / TELEPHONE: (415) 781-1989
/ / TELEFAX: (415) 398-3249
/ / TELEX: 910 277299
/ / INFORMATION FOR SEQ ID NO: 8:
/ / SEQUENCE CHARACTERISTICS:
/ / LENGTH: 15 base pairs
/ / TYPE: nucleic acid
/ / STRANDEDNESS: single
/ / TOPOLOGY: linear
/ / MOLECULE TYPE: CDNA
PCT-US95-05420-8

```

```
Query Match      67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 19;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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Qy	2	GGCGGCGGCATCG	15
Db	1	GGAGGCGGCATGG	14

```

RESULT 17
PCT-US95-05420-9/c
; Sequence 9, Application PC/TUS9505420
; GENERAL INFORMATION:
; APPLICANT: Dzaou, Victor J
; APPLICANT: Kaneda, Yasufumi
; TITLE OF INVENTION: METHOD FOR IN VIVO DELIVERY OF
; TITLE OF INVENTION: THERAPEUTIC AGENTS VIA LIPOSOMES
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-4187
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/05420
; FILING DATE: 28 April 1995

```

```
Query Match      67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 19;
Matches 12: Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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Qy 2 GGCGGGCGGCATCG 15
Dp 15 GGAGGGCGGCATGG 2

RESULT 18

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US-08-757-024-697
; Sequence 697, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234

```

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA: US/08/77-024-697
 APPLICATION NUMBER: 26-NOV-1996
 FILING DATE: 26-NOV-1996
 CLASSIFICATION: 514
 ATTORNEY/AGENT INFORMATION:
 NAME: Sibley, Kenneth D.
 REGISTRATION NUMBER: 31,665
 REFERENCE/DOCKET NUMBER: 52
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 919-881-3140
 TELEFAX: 919-881-3175
 TELEX: 575302
 INFORMATION FOR SEQ ID NO: 697:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 12 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-77-024-697

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Query Match      65.0%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 18;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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Qy 2 GCGGGCGGCAT 13
|||
pb 1 GGAGGGCGGCAT 12

RESULT 19
US-09-093-972C-697
; Sequence 697, Application US/09093972C
; Patent NO. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; City: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/093,972C


```
;
; BRONCHOCONSTRICTION, ALLERGY (IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
;
; INFORMATION FOR SEQ ID NO: 675:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 675:
US-09-093-972C-675

Query Match 65.0%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 20;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
|| |||||
Db 2 GGAGGGCGGCAT 13

RESULT 23
US-09-093-972C-696
; Sequence 696, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY (IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
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;
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
;
; INFORMATION FOR SEQ ID NO: 696:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 696:
US-09-093-972C-696

Query Match 65.0%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 20;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
|| |||||
Db 1 GGAGGGCGGCAT 12

RESULT 24
US-08-757-024-652
; Sequence 652, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
;
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
```


STATE: New Jersey
COUNTRY: USA
ZIP: 08512
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA: US/09/093,972C
APPLICATION NUMBER: US/09/093,972C
FILING DATE: 09-Jun-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 08/757,024
FILING DATE: 26-11-1996
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 09/016,464
FILING DATE: 30-January-1998
ATTORNEY/AGENT INFORMATION:
NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: EPI-00672
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-409-3035
TELEFAX: 413-254-9245
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 674:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 base pairs
TYPE: nucleic acid
STRADEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 674:
US-09-093-972C-674
Query Match 65.0%; Score 10.4; DB 1; Length 14;
Best Local Similarity 91.7%; Pred. No. 22;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GCGGGCGGCAT 13
Db 2 GGAGGCGGCAT 13
RESULT 28
US-09-264-693-10
; Sequence 10, Application US/09264693
; Patent No. 6261760
; GENERAL INFORMATION:
; APPLICANT: Fielding, Christopher E
; TITLE OF INVENTION: REGULATION OF THE CEL CYCLE BY STEROLS
; FILE REFERENCE: 2500.141US1 Regulation of cell cycle
; CURRENT APPLICATION NUMBER: US/09/264,693
; EARLIER FILING DATE: 1999-03-08
; EARLIER FILING DATE: 1998-03-09
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Spl-like
; OTHER INFORMATION: binding sequence.
US-09-264-693-10
Query Match 62.5%; Score 10; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 18;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GCGGGCGGC 11
Db 1 GCGGGCGGC 10
RESULT 29
US-09-264-693-8
; Sequence 8, Application US/09264693
; Patent No. 6261760
; GENERAL INFORMATION:
; APPLICANT: Fielding, Christopher E
; TITLE OF INVENTION: REGULATION OF THE CEL CYCLE BY STEROLS
; FILE REFERENCE: 2500.141US1 Regulation of cell cycle
; CURRENT APPLICATION NUMBER: US/09/264,693
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 60/077,351
; EARLIER FILING DATE: 1998-03-09
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: caveolin
; OTHER INFORMATION: promoter sequence at -139 to -159 bp.
US-09-264-693-8
Query Match 62.5%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GCGGGCGGC 11
Db 3 GCGGGCGGC 12
RESULT 30
US-08-757-024-716
; Sequence 716, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102

; INFORMATION FOR SEQ ID NO: 716:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 13 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-757-024-716

Query Match 61.2%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 27;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGGGCGGCATCG 15

DB 1 GAGGGCGGCATGG 13

RESULT 31

US-09-093-972C-716

; Sequence 716, Application US/09093972C

; Patent No. 6825174

; GENERAL INFORMATION:

; APPLICANT: Nyce, Jonathan W.

; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
& TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
BRONCHOCONSTRICION, ALLERGY(IES) & INFLAMMATION

; NUMBER OF SEQUENCES: 996

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.

; STREET: 7 Clarke Drive

; CITY: Cranbury

; STATE: New Jersey

; COUNTRY: USA

; ZIP: 08512

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/093,972C

; FILING DATE: 09-Jun-1998

; CLASSIFICATION: <Unknown>

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/472,527

; FILING DATE: 7-June-1995

; APPLICATION NUMBER: US 08/757,024

; FILING DATE: 26-11-1996

; APPLICATION NUMBER: US 08/472,527

; FILING DATE: 7-June-1995

; APPLICATION NUMBER: US 09/016,464

; FILING DATE: 30-January-1998

; ATTORNEY/AGENT INFORMATION:

; NAME: Amzel, Viviana

; REGISTRATION NUMBER: 30,930

; REFERENCE/DOCKET NUMBER: BPI-00672

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 609-409-3035

; TELEFAX: 413-254-9245

; INFORMATION FOR SEQ ID NO: 716:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 13 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 716:

US-09-093-972C-716

Query Match

Best Local Similarity 61.2%; Score 9.8; DB 1; Length 13;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGGGCGGCATCG 15

DB 1 GAGGGCGGCATGG 13

RESULT 32

US-08-757-024-715

; Sequence 715, Application US/08757024

; Patent No. 6025339

; GENERAL INFORMATION:

; APPLICANT: Nyce, Jonathan W.

; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA

; NUMBER OF SEQUENCES: 952

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BELL, SELTZER, PARK & GIBSON

; STREET: P.O. Drawer 34009

; CITY: Charlotte

; STATE: No. 6025339th Carolina

; COUNTRY: USA

; ZIP: 28234

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/757,024

; FILING DATE: 26-NOV-1996

; CLASSIFICATION: 514

; ATTORNEY/AGENT INFORMATION:

; NAME: Sibley, Kenneth D.

; REGISTRATION NUMBER: 31,665

; REFERENCE/DOCKET NUMBER: 5218-41

; TELEPHONE: 919-881-3140

; TELEFAX: 919-881-3175

; TELEX: 575102

; INFORMATION FOR SEQ ID NO: 715:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 14 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-757-024-715

Query Match 61.2%; Score 9.8; DB 1; Length 14;

Best Local Similarity 84.6%; Pred. No. 29;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGGGCGGCATCG 15

DB 1 GAGGGCGGCATGG 13

RESULT 33

US-09-093-972C-715

; Sequence 715, Application US/09093972C

; Patent No. 6825174

; GENERAL INFORMATION:

; APPLICANT: Nyce, Jonathan W.

; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
& TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
BRONCHOCONSTRICION, ALLERGY(IES) & INFLAMMATION

; NUMBER OF SEQUENCES: 996

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.

; STREET: 7 Clarke Drive

; CITY: Cranbury

; STATE: New Jersey

; COUNTRY: USA

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;
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/09/093,972C
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 715:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 14 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 715:
US-09-093-972C-715

Query Match 61.2%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 29;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3 GCGGGCGGCATCG 15
Db 1 GAGGGCGGCATGG 13

RESULT 34
US-08-757-024-698
; Sequence 698, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 718:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 718:
US-08-757-024-718

Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGGCGGCAT 13
Db 1 GAGGGCGGCAT 11
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;
;
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 698:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 698:
US-08-757-024-698

Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GCGGGCGGCACA 12
Db 1 GGAGGGCGGCACA 11

RESULT 35
US-08-757-024-718
; Sequence 718, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 718:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 718:
US-08-757-024-718

Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGGCGGCAT 13
Db 1 GAGGGCGGCAT 11
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RESULT 36

US-08-757-024-755
 ; Sequence 755, Application US/08757024
 ; Patent No. 6025339
 ; GENERAL INFORMATION:
 ; APPLICANT: Nyce, Jonathan W.
 ; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
 ; NUMBER OF SEQUENCES: 952
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
 ; STREET: P.O. Drawer 34009
 ; CITY: Charlotte
 ; STATE: No. 6025339th Carolina
 ; COUNTRY: USA
 ; ZIP: 28234
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,024
 ; FILING DATE: 26-NOV-1996
 ; CLASSIFICATION: 514
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Sibley, Kenneth D.
 ; REGISTRATION NUMBER: 31,665
 ; REFERENCE/DOCKET NUMBER: 5218-41
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 919-881-3140
 ; TELEFAX: 919-881-3175
 ; TELEX: 575102
 ; INFORMATION FOR SEQ ID NO: 755:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 11 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; US-08-757-024-755

Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 27;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 GCGCGGCATCG 15
 |||||
 Db 1 GCGCGGCATGG 11

RESULT 37

US-09-093-972C-698
 ; Sequence 698, Application US/09093972C
 ; Patent No. 6825174
 ; GENERAL INFORMATION:
 ; APPLICANT: Nyce, Jonathan W.
 ; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
 ; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
 ; BRONCHOCONSTRUCTION, ALLERGY(IES) & INFLAMMATION
 ; NUMBER OF SEQUENCES: 996
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
 ; STREET: 7 Clarke Drive
 ; CITY: Cranbury
 ; STATE: New Jersey
 ; COUNTRY: USA
 ; ZIP: 08512
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/093,972C
 ; FILING DATE: 09-Jun-1998
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/472,527
 ; FILING DATE: 7-June-1995
 ; APPLICATION NUMBER: US 08/757,024
 ; FILING DATE: 26-11-1996
 ; APPLICATION NUMBER: US 08/472,527
 ; FILING DATE: 7-June-1995
 ; APPLICATION NUMBER: US 09/016,464

APPLICATION NUMBER: US/09/093,972C
 FILING DATE: 09-Jun-1998
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/472,527
 FILING DATE: 7-June-1995
 APPLICATION NUMBER: US 08/757,024
 FILING DATE: 26-11-1996
 APPLICATION NUMBER: US 08/472,527
 FILING DATE: 7-June-1995
 APPLICATION NUMBER: US 09/016,464
 FILING DATE: 30-January-1998
 ATTORNEY/AGENT INFORMATION:
 NAME: Amzel, Viviana
 REGISTRATION NUMBER: 30,930
 REFERENCE/DOCKET NUMBER: EPI-00672
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 609-409-3035
 TELEFAX: 413-254-9245
 TELEX: <Unknown>
 INFORMATION FOR SEQ ID NO: 698:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 11 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 SEQUENCE DESCRIPTION: SEQ ID NO: 698:
 US-09-093-972C-698

Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 27;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GCGCGCGCGCA 12
 |||||
 Db 1 GGAGGCGCGCA 11

RESULT 38

US-09-093-972C-718
 ; Sequence 718, Application US/09093972C
 ; Patent No. 6825174
 ; GENERAL INFORMATION:
 ; APPLICANT: Nyce, Jonathan W.
 ; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
 ; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
 ; BRONCHOCONSTRUCTION, ALLERGY(IES) & INFLAMMATION
 ; NUMBER OF SEQUENCES: 996
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
 ; STREET: 7 Clarke Drive
 ; CITY: Cranbury
 ; STATE: New Jersey
 ; COUNTRY: USA
 ; ZIP: 08512
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/093,972C
 ; FILING DATE: 09-Jun-1998
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/472,527
 ; FILING DATE: 7-June-1995
 ; APPLICATION NUMBER: US 08/757,024
 ; FILING DATE: 26-11-1996
 ; APPLICATION NUMBER: US 08/472,527
 ; FILING DATE: 7-June-1995
 ; APPLICATION NUMBER: US 09/016,464

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;
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELE: <Unknown>
; INFORMATION FOR SEQ ID NO: 718:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 718:
US-09-093-972C-718

Query Match      58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGCAT 13
      | | | | | | | |
Db      1 GAGGGCGGCAT 11

RESULT 39
US-09-093-972C-755
; Sequence 755, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELE: <Unknown>
; INFORMATION FOR SEQ ID NO: 755:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 755:
US-09-093-972C-755

Query Match      58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      5 GGGCGGCATCG 15
      | | | | | | | |
Db      1 GGGCGGCATGG 11

RESULT 40
US-07-972-387-68/c
; Sequence 68, Application US/07972387
; Patent No. 5451659
; GENERAL INFORMATION:
; APPLICANT: Morishita, Hideaki
; APPLICANT: Kanamori, Toshinori
; APPLICANT: No. 5451659uhara, Masahiro
; TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
; TITLE OF INVENTION: Same, Drug Composition Containing the Same
; TITLE OF INVENTION: Producing the Same
; NUMBER OF SEQUENCES: 76
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: 301 N. Washington St.
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22046-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/972,387
; FILING DATE: 19921105
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Murphy Jr., Gerald M.
; REGISTRATION NUMBER: 28,977
; REFERENCE/DOCKET NUMBER: 1110-124P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-241-1300
; TELEFAX: 703-241-2848
; TELE: 248345
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..12
; OTHER INFORMATION: /label= 5' extension
; OTHER INFORMATION: /note= "preferable additional amino terminal
; OTHER INFORMATION: codons for peptide protease inhibitors"
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..12
; OTHER INFORMATION: /product= "amino terminal addition"
; OTHER INFORMATION: /note= "preferable amino acids to be added to
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;
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 755:
US-09-093-972C-755

Query Match      58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 27;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      5 GGGCGGCATCG 15
      | | | | | | | |
Db      1 GGGCGGCATGG 11

RESULT 40
US-07-972-387-68/c
; Sequence 68, Application US/07972387
; Patent No. 5451659
; GENERAL INFORMATION:
; APPLICANT: Morishita, Hideaki
; APPLICANT: Kanamori, Toshinori
; APPLICANT: No. 5451659uhara, Masahiro
; TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
; TITLE OF INVENTION: Same, Drug Composition Containing the Same
; TITLE OF INVENTION: Producing the Same
; NUMBER OF SEQUENCES: 76
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: 301 N. Washington St.
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22046-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/972,387
; FILING DATE: 19921105
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Murphy Jr., Gerald M.
; REGISTRATION NUMBER: 28,977
; REFERENCE/DOCKET NUMBER: 1110-124P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-241-1300
; TELEFAX: 703-241-2848
; TELE: 248345
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..12
; OTHER INFORMATION: /label= 5' extension
; OTHER INFORMATION: /note= "preferable additional amino terminal
; OTHER INFORMATION: codons for peptide protease inhibitors"
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..12
; OTHER INFORMATION: /product= "amino terminal addition"
; OTHER INFORMATION: /note= "preferable amino acids to be added to
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OTHER INFORMATION: amino terminus of peptide protease inhibitors"
US-07-972-387-68

Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCATCGT 16
| | | | | | | |
DB 12 GCGGGCATCGT 2

RESULT 41
US-08-431-412-68/c
; Sequence 68, Application US/08431412
; Patent No. 5589360
; GENERAL INFORMATION:
; APPLICANT: Morishita, Hideaki
; APPLICANT: Kanamori, Toshinori
; APPLICANT: No. 5589360hara, Masahiro
; TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
; TITLE OF INVENTION: Same, Drug Composition Containing the Same and Process for
; TITLE OF INVENTION: Producing the Same
; NUMBER OF SEQUENCES: 76
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: 301 N. Washington St.
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22046-0747

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/431,412
FILING DATE: 28-APR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/972,387
FILING DATE: 03-NOV-1992

ATTORNEY/AGENT INFORMATION:
NAME: Murphy Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 1110-124P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-241-1300
TELEFAX: 703-241-2848
TELEX: 248345
INFORMATION FOR SEQ ID NO: 68:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
FEATURE:
NAME/KEY: CDS
LOCATION: 1..12

OTHER INFORMATION: /label= 5' extension
OTHER INFORMATION: /note= "preferable additional amino terminal
OTHER INFORMATION: codons for peptide protease inhibitors"
FEATURE:
NAME/KEY: CDS
LOCATION: 1..12
OTHER INFORMATION: /product= "amino terminal addition"
OTHER INFORMATION: /note= "preferable amino acids to be added to
OTHER INFORMATION: amino terminus of peptide protease inhibitors"

US-08-431-412-68
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCATCGT 16
| | | | | | | |
DB 12 GCGGGCATCGT 2

RESULT 42
US-08-057-971-68/c
; Sequence 68, Application US/08057971
; Patent No. 5679770
; GENERAL INFORMATION:
; APPLICANT: Morishita, Hideaki
; APPLICANT: Kanamori, Toshinori
; APPLICANT: No. 5679770hara, Masahiro
; TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
; TITLE OF INVENTION: Same, Drug Composition Containing the Same and Process for
; TITLE OF INVENTION: Producing the Same
; NUMBER OF SEQUENCES: 81
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/057,971
FILING DATE: 06-MAY-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Murphy Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 1110-129P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-205-8000
TELEFAX: 703-205-8050
TELEX:

INFORMATION FOR SEQ ID NO: 68:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
FEATURE:
NAME/KEY: -
LOCATION: 1..12

OTHER INFORMATION: /label= 5' extension
OTHER INFORMATION: /note= "preferable additional amino terminal
OTHER INFORMATION: codons for peptide protease inhibitors"
FEATURE:
NAME/KEY: CDS
LOCATION: 1..12
OTHER INFORMATION: /product= "amino terminal addition"
OTHER INFORMATION: /note= "preferable amino acids to be added to
OTHER INFORMATION: amino terminus of peptide protease inhibitors"

US-08-057-971-68
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      6 GCGGCGCATCGT 16
Db      12 GCGGCGCGTCGT 2

RESULT 43
US-08-757-024-676
; Sequence 676, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 717:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-717

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGCGCGCAT 13
Db      1 GAGGCGCGCAT 11

RESULT 45
US-08-757-024-736
; Sequence 736, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 736:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-736

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2 GCGGCGCGGCA 12
Db      2 GGAGGCGGCGCA 12

RESULT 44
US-08-757-024-717
; Sequence 717, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
```

```
Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
   |||||
Db 2 GGGCGGCATCG 12

RESULT 46
US-08-757-024-754
; Sequence 754, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 754:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-754

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
   |||||
Db 1 GGGCGGCATCG 11

RESULT 47
US-09-093-972C-676
; Sequence 676, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
```

```
STATE: New Jersey
COUNTRY: USA
ZIP: 08512
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/093,972C
FILING DATE: 09-Jun-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 08/757,024
FILING DATE: 26-11-1996
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 09/016,464
FILING DATE: 30-January-1998
ATTORNEY/AGENT INFORMATION:
NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: EPI-00672
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-409-3035
TELEFAX: 413-254-9245
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 676:
SEQUENCE CHARACTERISTICS:
LENGTH: 12 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 676:
US-09-093-972C-676

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGGCGGCGGCA 12
   |||||
Db 2 GGGCGGCGGCA 12

RESULT 48
US-09-093-972C-717
; Sequence 717, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/093,972C
FILING DATE: 09-Jun-1998
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;
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
;
; INFORMATION FOR SEQ ID NO: 717:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 717:
US-09-093-972C-717
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCAT 13
Db 1 GAGGGCGGCAT 11

RESULT 49
US-09-093-972C-736
; Sequence 736, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCOSTRUCTION, ALLERGY(IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
;
; INFORMATION FOR SEQ ID NO: 754:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
```

```
;
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 736:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 736:
US-09-093-972C-736
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 2 GGGCGGCATGG 12

RESULT 50
US-09-093-972C-754
; Sequence 754, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCOSTRUCTION, ALLERGY(IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 754:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
```



```

;
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 754:
US-09-093-972C-754

Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 30;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 1 GGGCGGCATCG 11

RESULT 51
US-08-757-024-653
; Sequence 653, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 735:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-735

Query Match      58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 33;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 2 GGGCGGCATCG 12

RESULT 53
US-08-757-024-753
; Sequence 753, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 653:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-653

Query Match      58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 33;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGGCGGCGGCA 12
Db 3 GGGCGGCGGCA 13

RESULT 52
US-08-757-024-735
; Sequence 735, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
```

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;
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 753:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-753

Query Match          58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 33;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 1 GGGCGGCATGG 11

RESULT 54
US-09-093-972C-653
; Sequence 653, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 653:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 653:
US-09-093-972C-653

Query Match          58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 33;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 1 GGGCGGCATGG 11

RESULT 55
US-09-093-972C-735
; Sequence 735, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 735:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 735:
US-09-093-972C-735

Query Match          58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 33;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 2 GGGCGGCATGG 12

RESULT 56
US-09-093-972C-753
; Sequence 753, Application US/09093972C
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/ Patent No. 6825174
/ GENERAL INFORMATION:
/ APPLICANT: Nyce, Jonathan W.
/ TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
/ & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
/ BRONCHOCONSTRICTION, ALLERGY (IES) & INFLAMMATION
/
/ NUMBER OF SEQUENCES: 996
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
/ STREET: 7 Clarke Drive
/ CITY: Cranbury
/ STATE: New Jersey
/ COUNTRY: USA
/
/ ZIP: 08512
/
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/093,972C
/ FILING DATE: 09-Jun-1998
/ CLASSIFICATION: <Unknown>
/
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/472,527
/ FILING DATE: 7-June-1995
/ APPLICATION NUMBER: US 08/757,024
/ FILING DATE: 26-11-1996
/ APPLICATION NUMBER: US 08/472,527
/ FILING DATE: 7-June-1995
/ APPLICATION NUMBER: US 09/016,464
/ FILING DATE: 30-January-1998
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Amzel, Viviana
/ REGISTRATION NUMBER: 30,930
/ REFERENCE/DOCKET NUMBER: EPI-00672
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 609-409-3035
/ TELEFAX: 413-254-9245
/ TELEX: <Unknown>
/
/ INFORMATION FOR SEQ ID NO: 753:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 13 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ SEQUENCE DESCRIPTION: SEQ ID NO: 753:
/
/ US-09-093-972C-753
/
/ Query Match 58.7%; Score 9.4; DB 1; Length 13;
/ Best Local Similarity 90.9%; Pred. No. 33;
/ Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
/
/ QY 5 GGGCGGCATCG 15
/ Db 1 GGGCGGCATCG 11
/
/ RESULT 57
/ US-08-757-024-738
/ Sequence 738, Application US/08757024
/ Patent No. 6025339
/ GENERAL INFORMATION:
/ APPLICANT: Nyce, Jonathan W.
/ TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
/ NUMBER OF SEQUENCES: 952
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: BELL, SELTZER, PARK & GIBSON
/ STREET: P.O. Drawer 34009
/ CITY: Charlotte
/ STATE: No. 6025339th Carolina
/ COUNTRY: USA
/
/ ZIP: 28234
/
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/757,024
/ FILING DATE: 26-NOV-1996
/ CLASSIFICATION: 514
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Sibley, Kenneth D.
/ REGISTRATION NUMBER: 31,665
/ REFERENCE/DOCKET NUMBER: 5218-41
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 919-881-3140
/ TELEFAX: 919-881-3175
/ TELEX: 575102
/ INFORMATION FOR SEQ ID NO: 756:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 10 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/
/ Patent No. 6825174
/ GENERAL INFORMATION:
/ APPLICANT: Nyce, Jonathan W.
/ TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
/ & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
/ BRONCHOCONSTRICTION, ALLERGY (IES) & INFLAMMATION
/
/ NUMBER OF SEQUENCES: 996
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
/ STREET: 7 Clarke Drive
/ CITY: Cranbury
/ STATE: New Jersey
/ COUNTRY: USA
/
/ ZIP: 08512
/
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/093,972C
/ FILING DATE: 09-Jun-1998
/ CLASSIFICATION: <Unknown>
/
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/472,527
/ FILING DATE: 7-June-1995
/ APPLICATION NUMBER: US 08/757,024
/ FILING DATE: 26-11-1996
/ APPLICATION NUMBER: US 08/472,527
/ FILING DATE: 7-June-1995
/ APPLICATION NUMBER: US 09/016,464
/ FILING DATE: 30-January-1998
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Amzel, Viviana
/ REGISTRATION NUMBER: 30,930
/ REFERENCE/DOCKET NUMBER: EPI-00672
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 609-409-3035
/ TELEFAX: 413-254-9245
/ TELEX: <Unknown>
/
/ INFORMATION FOR SEQ ID NO: 753:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 13 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ SEQUENCE DESCRIPTION: SEQ ID NO: 753:
/
/ US-09-093-972C-753
/
/ Query Match 56.2%; Score 9; DB 1; Length 10;
/ Best Local Similarity 100.0%; Pred. No. 30;
/ Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
/
/ QY 5 GGGCGGCAT 13
/ Db 2 GGGCGGCAT 10
/
/ RESULT 58
/ US-08-757-024-756
/ Sequence 756, Application US/08757024
/ Patent No. 6025339
/ GENERAL INFORMATION:
/ APPLICANT: Nyce, Jonathan W.
/ TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
/ NUMBER OF SEQUENCES: 952
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: BELL, SELTZER, PARK & GIBSON
/ STREET: P.O. Drawer 34009
/ CITY: Charlotte
/ STATE: No. 6025339th Carolina
/ COUNTRY: USA
/
/ ZIP: 28234
/
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/757,024
/ FILING DATE: 26-NOV-1996
/ CLASSIFICATION: 514
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Sibley, Kenneth D.
/ REGISTRATION NUMBER: 31,665
/ REFERENCE/DOCKET NUMBER: 5218-41
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 919-881-3140
/ TELEFAX: 919-881-3175
/ TELEX: 575102
/ INFORMATION FOR SEQ ID NO: 756:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 10 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
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; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-756

Query Match          56.2%; Score 9; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
Db 1 GGGCGGCAT 9

RESULT 59
US-09-093-972C-738
; Sequence 738, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 738:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 738:
US-09-093-972C-738

Query Match          56.2%; Score 9; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
Db 2 GGGCGGCAT 10

RESULT 60
US-09-093-972C-756
; Sequence 756, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 756:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 756:
US-09-093-972C-756

Query Match          56.2%; Score 9; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
Db 1 GGGCGGCAT 9

RESULT 61
US-08-757-024-737
; Sequence 737, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
```

```

; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/08/757,024
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 737:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-024-737

Query Match 56.2%; Score 9; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
DB 2 GGGCGGCAT 10

RESULT 62
US-09-220-510B-4
; Sequence 4, Application US/09220510B
; Patent No. 6440726
; GENERAL INFORMATION:
; APPLICANT: RESNICK, NITZAN
; TITLE OF INVENTION: EXPRESSION VECTORS COMPRISING MULTIPLE SHEAR STRESS
; TITLE OF INVENTION: RESPONSIVE ELEMENTS (SSRE) AND METHODS OF USE FOR
; TITLE OF INVENTION: TREATING DISORDERS RELATED TO VASCULOGENESIS AND/OR
; TITLE OF INVENTION: ANGIOGENESIS IN A SHEAR STRESS ENVIRONMENT
; FILE REFERENCE: P-2771-US
; CURRENT APPLICATION NUMBER: US/09/220,510B
; CURRENT FILING DATE: 1998-12-24
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial sequence: An SP1 sequence.
US-09-220-510B-4

Query Match 56.2%; Score 9; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGGCGGCGG 10
DB 3 GGGCGGCGG 11

```

```

RESULT 63
US-09-093-972C-737
; Sequence 737, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHIOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 737:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 737:
US-09-093-972C-737

Query Match 56.2%; Score 9; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 33;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
DB 2 GGGCGGCAT 10

RESULT 64
US-08-116-388-7/c
; Sequence 7, Application US/08116388
; Patent No. 5453355
; GENERAL INFORMATION:
; APPLICANT: Birkenmeyer, Larry G.
; APPLICANT: Ching, ShanFun
; APPLICANT: Ohnashi, Yashiro
; APPLICANT: Winkler, Janet K.
; TITLE OF INVENTION: Oligonucleotides and Methods for Detecting
; TITLE OF INVENTION: Neisseria Gonorrhoeae

```

```
;
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES
; STREET: One Abbott Park Road
; CITY: Abbott Park
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MSDOS
; SOFTWARE: WordPerfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/116,388
; FILING DATE: 03 SEPTEMBER 1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Brainard, Thomas D.
; REGISTRATION NUMBER: 32,459
; REFERENCE/DOCKET NUMBER: 5373.US.O1
; TELEPHONE: 708 937-4884
; TELEFAX: 708 938-2623
; TELEX:
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-116-388-7

Query Match 55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 40;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 GCGCGGCATCGT 16
DB 12 GCGCGGGTCTG 1

RESULT 65
US-08-726-214-27/c
; Sequence 27, Application US/08726214
; Patent No. 6107076
; GENERAL INFORMATION:
; APPLICANT: Tang, Wei-Jen
; APPLICANT: Gilman, Alfred G.
; TITLE OF INVENTION: SOLUBLE MAMMALIAN ADENYLYL CYCLASE
; TITLE OF INVENTION: AND USES THEREFOR
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: United States of America
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/726,214
; FILING DATE: Concurrently Herewith
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/005,498
; FILING DATE: 04-OCT-1995
; ATTORNEY/AGENT INFORMATION:
```

```
;
; NAME: Highlander, Steven L.
; REGISTRATION NUMBER: 37,642
; REFERENCE/DOCKET NUMBER: UTSD:450
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (512) 418-3000
; TELEFAX: (512) 474-7577
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-726-214-27

Query Match 55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 40;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGCGGCATC 14
DB 12 GCTGGAGCATC 1

RESULT 66
PCT-US94-09318-7/c
; Sequence 7, Application PC/TUS9409318
; GENERAL INFORMATION:
; APPLICANT: ABBOTT LABORATORIES
; APPLICANT: for: Birkenmeyer, Larry G.
; APPLICANT: Ching, ShanFun
; APPLICANT: Ohnashi, Yoshihiro
; APPLICANT: Winkler, Janet K.
; TITLE OF INVENTION: Oligonucleotides and Methods for Detecting
; TITLE OF INVENTION: Neisseria Gonorrhoeae
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES
; STREET: One Abbott Park Road
; CITY: Abbott Park
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MSDOS
; SOFTWARE: WordPerfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/09318
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Brainard, Thomas D.
; REGISTRATION NUMBER: 32,459
; REFERENCE/DOCKET NUMBER: 5373.PC.O1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708 937-4884
; TELEFAX: 708 938-2623
; TELEX:
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; PCT-US94-09318-7

Query Match 55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 40;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 GCGCGGCATCGT 16
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;
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-719

Query Match      52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 40;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGCA 12
Db      1 GAGGGCGGCA 10

RESULT 70
US-08-757-024-773
; Sequence 773, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 773:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-773

Query Match      52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 40;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      6 GCGGGCATCG 15
Db      1 GCGGGCATCG 10

RESULT 71
US-09-097-053-7
; Sequence 7, Application US/09097053
; Patent No. 6392025
; GENERAL INFORMATION:
; APPLICANT: Brant, Steven R.
; APPLICANT: Yun, Chris C.H.
; APPLICANT: Donowitz, Mark
; APPLICANT: Tse, Chung-Ming
; TITLE OF INVENTION: Cloning, Tissue Distribution, and
```

```
;
; TITLE OF INVENTION: Functional Analysis Of The Human Na+/H+ Exchanger Isoform,
; TITLE OF INVENTION: NHE3.
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W., Suite 700
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/097,053
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/677,734
; FILING DATE: 10-JUL-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fordis, Jean B.
; REGISTRATION NUMBER: 32,984
; REFERENCE/DOCKET NUMBER: 05387.0043-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-097-053-7

Query Match      52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 40;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGCA 12
Db      1 GCAGGCGGCA 10

RESULT 72
US-09-093-972C-699
; Sequence 699, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRUCTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
```



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/
/
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/472,527
/ FILING DATE: 7-June-1995
/ APPLICATION NUMBER: US 08/757,024
/ FILING DATE: 26-11-1996
/ APPLICATION NUMBER: US 08/472,527
/ FILING DATE: 7-June-1995
/ APPLICATION NUMBER: US 09/016,464
/ FILING DATE: 30-January-1998
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Amzel, Viviana
/ REGISTRATION NUMBER: 30,930
/ REFERENCE/DOCKET NUMBER: EPI-00672
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 609-409-3035
/ TELEFAX: 413-254-9245
/ TELEX: <Unknown>
/ INFORMATION FOR SEQ ID NO: 699:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 10 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ SEQUENCE DESCRIPTION: SEQ ID NO: 699:
US-09-093-972C-699
Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 40;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGCG 11
   |||||
Db 1 GCGGGCGGCG 10

RESULT 73
US-09-093-972C-719
; Sequence 719, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY (IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 773:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid

/
/
/ NAME: Amzel, Viviana
/ REGISTRATION NUMBER: 30,930
/ REFERENCE/DOCKET NUMBER: EPI-00672
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 609-409-3035
/ TELEFAX: 413-254-9245
/ TELEX: <Unknown>
/ INFORMATION FOR SEQ ID NO: 719:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 10 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ SEQUENCE DESCRIPTION: SEQ ID NO: 719:
US-09-093-972C-719
Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 40;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCA 12
   |||||
Db 1 GAGGGCGGCA 10

RESULT 74
US-09-093-972C-773
; Sequence 773, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY (IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 773:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
```

```
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 773:
US-09-093-972C-773

Query Match          52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 40;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
    |||||
Db 1 GCGGCGCATGG 10

RESULT 75
US-08-757-024-677
; Sequence 677, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 772:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-024-772

Query Match          52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
    |||||
Db 1 GCGGCGCATGG 10

RESULT 77
US-09-165-239A-9/c
; Sequence 9, Application US/09165239A
; Patent No. 6344554
; GENERAL INFORMATION:
; APPLICANT: JOHNSON, ALEXANDER
; APPLICANT: BRAUN, BURKHARD R
; TITLE OF INVENTION: POLYNUCLEOTIDE SEQUENCES FROM CANDIDA
; TITLE OF INVENTION: ALBICANS ENCODING POLYPEPTIDES ASSOCIATED WITH FILAMENTOUS
; TITLE OF INVENTION: GROWTH
; FILE REFERENCE: 22002200700
; CURRENT APPLICATION NUMBER: US/09/165,239A
; CURRENT FILING DATE: 1998-10-01
; PRIOR APPLICATION NUMBER: 60/068,065
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Candida albicans
; US-09-165-239A-9

Query Match          52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGCGCG 10
    |||||
Db 11 CGGAGGCGCG 2

; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
```

RESULT 78
US-09-182-145-44/c
; Sequence 44, Application US/09182145B
; Patent No. 6387657
; GENERAL INFORMATION:
; APPLICANT: Botstein, David A.
; APPLICANT: Cohen, Robert
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Lawrence, David A.
; APPLICANT: Levine, Arnold J.
; APPLICANT: Pennica, Diane
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: WISP POLYPEPTIDES AND NUCLEIC ACIDS ENCODING SAME
; FILE REFERENCE: P1176R2
; CURRENT APPLICATION NUMBER: US/09/182,145B
; CURRENT FILING DATE: 1998-10-29
; EARLIER APPLICATION NUMBER: US 60/063,704
; EARLIER FILING DATE: 1997-10-29
; EARLIER APPLICATION NUMBER: US 60/073,612
; EARLIER FILING DATE: 1998-02-04
; EARLIER APPLICATION NUMBER: US 60/081,695
; EARLIER FILING DATE: 1998-04-14
; NUMBER OF SEQ ID NOS: 156
; SEQ ID NO 44
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 1-11
; OTHER INFORMATION: Sequence is synthesized
; Patent No. 6387657
US-09-182-145-44

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGGCGG 10
||| |||||
DB 11 CGGAGGGCGG 2

RESULT 79
US-08-944-410-79/c
; Sequence 79, Application US/08944410
; Patent No. 6607878
; GENERAL INFORMATION:
; APPLICANT: Sorge, Joseph A.
; TITLE OF INVENTION: COLLECTIONS OF UNIQUELY TAGGED MOLECULES
; FILE REFERENCE: 04121.0018-00000
; CURRENT APPLICATION NUMBER: US/08/944,410
; CURRENT FILING DATE: 1997-10-06
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 79
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Synthetic primer
US-08-944-410-79

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGGCGG 10
||| |||||

Db 11 CGGAGGGCGG 2

RESULT 80
US-09-643-657-23/c
; Sequence 23, Application US/09643657
; Patent No. 6642024
; GENERAL INFORMATION:
; APPLICANT: Diane Pennica
; TITLE OF INVENTION: GUANYLATE-BINDING PROTEIN
; NUMBER OF SEQUENCES: 43
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,657
; FILING DATE: 17-Aug-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/015,089A
; FILING DATE: 29-Jan-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Hasak, Janet E.
; REGISTRATION NUMBER: 28,616
; REFERENCE/DOCKET NUMBER: P1056
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1896
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-643-657-23

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGGCGG 10
||| |||||
DB 11 CGGAGGGCGG 2

RESULT 81
US-09-563-997A-41/c
; Sequence 41, Application US/09563997A
; Patent No. 6677437
; GENERAL INFORMATION:
; APPLICANT: Nezu, Jun-Ichi
; APPLICANT: Oku, Asuka
; TITLE OF INVENTION: NOVEL SERINE-THREONINE KINASE GENE
; FILE REFERENCE: 06501-033002
; CURRENT APPLICATION NUMBER: US/09/563,997A
; CURRENT FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: US 09/344,700
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: PCT/JP97/04855
; PRIOR FILING DATE: 1997-12-25
; PRIOR APPLICATION NUMBER: JP 8-357864
; PRIOR FILING DATE: 1996-12-27
; NUMBER OF SEQ ID NOS: 48

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; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetically generated oligonucleotide
US-09-563-997A-41

Query Match          52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGCG 10
   ||| |||||
Db 11 CGAGGGCGG 2

RESULT 82
US-09-521-195B-32/c
; Sequence 32, Application US/09521195B
; Patent No. 6759514
; GENERAL INFORMATION:
; APPLICANT: Nezu, Jun-Ichi
; TITLE OF INVENTION: TRANSPORTER GENES
; FILE REFERENCE: 06501-057001
; CURRENT APPLICATION NUMBER: US/09/521,195B
; PRIOR FILING DATE: 2000-03-07
; PRIOR APPLICATION NUMBER: JP 10/156660
; PRIOR FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: JP 9/260972
; PRIOR FILING DATE: 1997-09-08
; PRIOR APPLICATION NUMBER: PCT/JP98/04009
; PRIOR FILING DATE: 1998-09-07
; NUMBER OF SEQ ID NOS: 33
; SEQ ID NO 32
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Artificial Synthesized Adapte
US-09-521-195B-32

Query Match          52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGCG 10
   ||| |||||
Db 11 CGAGGGCGG 2

RESULT 83
US-09-093-972C-677
; Sequence 677, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
& TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
BRONCHOCOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
NUMBER OF SEQUENCES: 996
CORRESPONDENCE ADDRESS:
ADDRESSSEE: EPIGENESIS PHARMACEUTICALS, INC.
STREET: 7 Clarke Drive
CITY: Cranbury
STATE: New Jersey
COUNTRY: USA
ZIP: 08512
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION NUMBER: US/09/093,972C
FILING DATE: 09-Jun-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION NUMBER: US/09/093,972C
FILING DATE: 09-Jun-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 08/472,527
FILING DATE: 26-11-1996
COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 677:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 677:
US-09-093-972C-677

Query Match          52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
   ||| |||||
Db 2 GGAGGGCGC 11

RESULT 84
US-09-093-972C-772
; Sequence 772, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
& TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
BRONCHOCOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
NUMBER OF SEQUENCES: 996
CORRESPONDENCE ADDRESS:
ADDRESSSEE: EPIGENESIS PHARMACEUTICALS, INC.
STREET: 7 Clarke Drive
CITY: Cranbury
STATE: New Jersey
COUNTRY: USA
ZIP: 08512
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION NUMBER: US/09/093,972C
FILING DATE: 09-Jun-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 08/472,527
FILING DATE: 26-11-1996
COMPUTER: IBM PC compatible
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APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 09/016,464
FILING DATE: 30-January-1998
ATTORNEY/AGENT INFORMATION:
NAME: Anzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: EPI-00672
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-409-3035
TELEFAX: 413-254-9245
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 772:
SEQUENCE CHARACTERISTICS:
LENGTH: 11 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 772:
US-09-093-972C-772

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 44;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGCGCATCG 15
|||||
DB 1 GCGCGCATCG 10

RESULT 85
US-08-025-038-23
; Sequence 23, Application US/08025038
; Patent No. 5545526
; GENERAL INFORMATION:
; APPLICANT: BAXTER-LOWE, Lee-Ann
; TITLE OF INVENTION: Method For HLA Typing
; NUMBER OF SEQUENCES: 46
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 777 E. Wisconsin Avenue
; CITY: Milwaukee
; STATE: Wisconsin
; COUNTRY: USA
; ZIP: 53202-5367
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/025,038
; FILING DATE: 19930301
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/544,218
; FILING DATE: 27-JUN-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Philip G.
; REGISTRATION NUMBER: 30,478
; REFERENCE/DOCKET NUMBER: 204 854
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (414)289-3761
; TELEFAX: (414)289-3791
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-025-038-23

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 48;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 10
|||||
DB 3 CGCGGGCGG 12

RESULT 86
US-08-123-702-5/c
; Sequence 5, Application US/08123702
; Patent No. 5604131
; GENERAL INFORMATION:
; APPLICANT: Wadsworth, Samuel
; APPLICANT: Snyder, Benjamin
; APPLICANT: Reddy, Vermuri, B.
; APPLICANT: Wei, Chamer
; TITLE OF INVENTION: A cDNA Genomic Hybrid Sequence Encoding APP770
; Patent No. 5604131
; TITLE OF INVENTION: Containing a Genomic DNA Insert of the KI and OX-2 Regions
; NUMBER OF SEQUENCES: 45
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Patrea L. Pabst
; STREET: 2800 One Atlantic Center
; CITY: Atlanta
; STATE: GA
; COUNTRY: USA
; ZIP: 30309-3450
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/123,702
; FILING DATE: 17-SEPT-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Pabst, Patrea L.
; REGISTRATION NUMBER: 31,284
; REFERENCE/DOCKET NUMBER: TSI121
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (404)-873-8794
; TELEFAX: (404)-873-8795
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..12
US-08-123-702-5

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 48;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGCGGGCAT 13
|||||
DB 10 CGCGGGCAT 1

RESULT 87
US-08-757-024-654
; Sequence 654, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.

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;
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 654:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-024-654

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 48;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
DB 3 GGAGGGCGGC 12

RESULT 88
US-08-757-024-771
; Sequence 771, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
```

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;
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 771:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-024-771

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 48;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATCG 15
DB 1 GGCGGCATCG 10

RESULT 89
US-09-393-783A-30/c
; Sequence 30, Application US/09393783A
; Patent No. 6355428
; GENERAL INFORMATION:
; APPLICANT: Schroth, Gary P.
; APPLICANT: Bruice, Thomas Wayne
; APPLICANT: Suh, Young J.
; TITLE OF INVENTION: Nucleic Acid Ligand Interaction Assays
; FILE REFERENCE: 4600-0128.30
; CURRENT APPLICATION NUMBER: US/09/393,783A
; CURRENT FILING DATE: 1999-10-09
; PRIOR APPLICATION NUMBER: US 09/151,890
; PRIOR FILING DATE: 1998-09-11
; NUMBER OF SEQ ID NOS: 80
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 30
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc binding
; LOCATION: (1)...(12)
; OTHER INFORMATION: synthesized test oligonucleotide for binidng
; OTHER INFORMATION: studies
; US-09-393-783A-30

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 48;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATCG 15
DB 12 GGCGGCATCG 3

RESULT 90
US-09-151-890B-30/c
; Sequence 30, Application US/09151890B
; Patent No. 6420109
; GENERAL INFORMATION:
; APPLICANT: Gary P. Schroth
; APPLICANT: Thomas Wayne Bruice
; APPLICANT: Young J. Suh
; TITLE OF INVENTION: Nucleic Acid Ligand Interaction Assays
; FILE REFERENCE: 4600-0128
; CURRENT APPLICATION NUMBER: US/09/151,890B
; CURRENT FILING DATE: 1998-09-11
; NUMBER OF SEQ ID NOS: 80
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 30
; LENGTH: 12
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; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc binding
; LOCATION: (1)...(12)
; OTHER INFORMATION: synthesized test oligonucleotide for binidng
; OTHER INFORMATION: studies
US-09-151-890B-30

Query Match          52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 48;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
    |||||
DB 12 GCGGCGTATCG 3

RESULT 91
US-09-093-972C-654
; Sequence 654, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-June-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 654:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 654:
US-09-093-972C-654

Query Match          52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 48;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
    |||||
DB 12 GCGGCGTATCG 3

RESULT 92
US-09-093-972C-771
; Sequence 771, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-June-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 771:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 771:
US-09-093-972C-771

Query Match          52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 48;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
    |||||
DB 1 GCGGCGTATCG 10

RESULT 93
US-09-154-750A-12/c
; Sequence 12, Application US/09154750A
; Patent No. 6432640
```

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; GENERAL INFORMATION:
; APPLICANT: Vogelstein, Bert
; APPLICANT: Kinzler, Kenneth
; APPLICANT: Polyak, Kornelia
; TITLE OF INVENTION: p53-Induced Apoptosis
; FILE REFERENCE: 1107.75357
; CURRENT APPLICATION NUMBER: US/09/154,750A
; CURRENT FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/059,153
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/079817
; PRIOR FILING DATE: 1998-03-30
; NUMBER OF SEQ ID NOS: 93
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Homo sapiens
; ORGANISM: Homo sapiens
US-09-154-750A-12

Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGCGCGGC 8
Db      9 CGCGCGGC 2

RESULT 94
US-10-228-876-1/c
; Sequence 1, Application US/10228876
; Patent No. 6733996
; GENERAL INFORMATION:
; APPLICANT: Froehlich, Allan C.
; APPLICANT: Froehlich, Loros, Jennifer J.
; APPLICANT: Dunlap, Jay C.
; TITLE OF INVENTION: METHODS FOR REGULATING GENE EXPRESSION USING LIGHT
; FILE REFERENCE: DC-0194
; CURRENT APPLICATION NUMBER: US/10/228,876
; CURRENT FILING DATE: 2002-08-26
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Neurospora crassa
US-10-228-876-1

Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      7 GCGGCATC 14
Db      9 GCGGCATC 2

RESULT 95
US-07-778-233B-77
; Sequence 77, Application US/07778233B
; Patent No. 5270170
; GENERAL INFORMATION:
; APPLICANT: Schatz, Peter J.
; APPLICANT: Cull, Millard G.
; APPLICANT: Miller, Jeff F.
; TITLE OF INVENTION: Peptide Library and Screening Method
; NUMBER OF SEQUENCES: 78
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: William M. Smith
; STREET: One Market Plaza, Steuart Tower, Suite 2000
; CITY: San Francisco
; STATE: California
```

```
; COUNTRY: USA
; ZIP: 94105
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/778,233B
; FILING DATE: 19911016
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 11509-50
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422
; INFORMATION FOR SEQ ID NO: 77:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-778-233B-77

Query Match      48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 58;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      6 GCGGCATCGT 16
Db      1 GCGGCACCGT 11

RESULT 96
US-07-963-321-77
; Sequence 77, Application US/07963321
; Patent No. 5338665
; GENERAL INFORMATION:
; APPLICANT: Schatz, Peter J.
; APPLICANT: Cull, Millard G.
; APPLICANT: Miller, Jeff F.
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: Peptide Library and Screening Method
; NUMBER OF SEQUENCES: 91
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: William M. Smith
; STREET: One Market Plaza, Steuart Tower, Suite 2000
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94105
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/963,321
; FILING DATE: 19921015
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/778,223
; FILING DATE: 16-OCT-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 11509-50-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422
```


; INFORMATION FOR SEQ ID NO: 77:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-963-321-77

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 58;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 6 GGCGGCATCGT 16
|||||
Db 1 GGCGCCACCGT 11

RESULT 97

US-08-290-641-77
; Sequence 77, Application US/08290641
; Patent No. 5498530
; GENERAL INFORMATION:
; APPLICANT: Schatz, Peter J.
; APPLICANT: Cull, Millard G.
; APPLICANT: Miller, Jeff F.
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: Peptide Library and Screening Method
; NUMBER OF SEQUENCES: 91
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: William M. Smith
; STREET: One Market Plaza, Steuart Tower, Suite 2000
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94105

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/290,641
FILING DATE: 15-AUG-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/963,321
FILING DATE: 15-OCT-1992
APPLICATION NUMBER: US 07/778,223
FILING DATE: 16-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 11509-50-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO: 77:
SEQUENCE CHARACTERISTICS:
LENGTH: 11 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-290-641-77

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 58;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 6 GGCGGCATCGT 16
|||||
Db 1 GGCGCCACCGT 11

RESULT 98

US-08-548-540-77
; Sequence 77, Application US/08548540
; Patent No. 5733731
; GENERAL INFORMATION:
; APPLICANT: Schatz, Peter J.
; APPLICANT: Cull, Millard G.
; APPLICANT: Miller, Jeff F.
; APPLICANT: Stemmer, Willem P.C.
; APPLICANT: Gates, Christian M.
; TITLE OF INVENTION: Peptide Library and Screening Method
; NUMBER OF SEQUENCES: 162
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: William M. Smith
; STREET: One Market Plaza, Steuart Tower, Suite 2000
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94105

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/548,540
FILING DATE: 26-OCT-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/290,641
FILING DATE: 15-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/963,321
FILING DATE: 15-OCT-1992
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 16528J-001240US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO: 77:
SEQUENCE CHARACTERISTICS:
LENGTH: 11 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
US-08-548-540-77

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 58;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 6 GGCGGCATCGT 16
|||||
Db 1 GGCGCCACCGT 11

RESULT 99

PCT-US96-09809-77
; Sequence 77, Application PC/TUS9609809
; GENERAL INFORMATION:
; APPLICANT: Schatz, Peter J.
; APPLICANT: Cull, Millard G.
; APPLICANT: Miller, Jeff F.
; APPLICANT: Stemmer, Willem P.C.
; APPLICANT: Gates, Christian M.
; TITLE OF INVENTION: Peptide Library and Screening Method
; NUMBER OF SEQUENCES: 162
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: William M. Smith
; STREET: One Market Plaza, Steuart Tower, Suite 2000
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94105
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/09809
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/548,540
; FILING DATE: 26-OCT-1995
; APPLICATION NUMBER: US 08/290,641
; FILING DATE: 15-AUG-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/963,321
; FILING DATE: 15-OCT-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 16528J-001240US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422
; INFORMATION FOR SEQ ID NO: 77:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US96-09809-77

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 58;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 6 GCGGCGATCGT 16
||| |||
DB 1 GCGGCCACCGT 11

RESULT 100
US-08-480-994-18/c
; Sequence 18, Application US/08480994
; Patent No. 5834248
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480,994
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-033
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
US-08-480-994-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGATC 14
||| |||
DB 10 GCGTGCATC 2

RESULT 101
US-08-616-844-18/c
; Sequence 18, Application US/08616844
; Patent No. 5849578
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/616,844
; FILING DATE: 15-MAR-1996
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/599,654
; FILING DATE: 09-FEB-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-053
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090

```
;
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
; US-08-616-844-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATC 14
Db 10 GGCTGCATC 2

RESULT 102
US-08-599-654-18/c
; Sequence 18, Application US/08599654
; Patent No. 5882925
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/599,654
; FILING DATE: 09-FEB-1996
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-041
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
; US-08-599-654-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
```

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;
; BEST LOCAL SIMILARITY 88.9%; Pred. No. 64;
; Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATC 14
Db 10 GGCTGCATC 2

RESULT 103
US-08-734-973-14
; Sequence 14, Application US/08734973
; Patent No. 5912147
; GENERAL INFORMATION:
; APPLICANT: Stoler, Daniel L.
; APPLICANT: Basik, Mark
; APPLICANT: Anderson, Garth R.
; TITLE OF INVENTION: A Rapid Means For Quantitating
; TITLE OF INVENTION: Genomic Instability
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hodgson, Russ, Andrews, Woods & Goodyear
; STREET: 1800 One Mt Plaza
; CITY: Buffalo
; STATE: New York
; COUNTRY: United States
; ZIP: 14203-2391
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: MS-DOS/ Microsoft Windows
; SOFTWARE: Wordperfect for Windows
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/734,973
; FILING DATE: October 1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Nelson, M. Bud
; REGISTRATION NUMBER: 35,300
; REFERENCE/DOCKET NUMBER: 03551.0021
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (716) 856-4000
; TELEFAX: (716) 849-0349
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 nucleotides
; TYPE: nucleic acid
; STRANDEDNESS: single-stranded
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; HYPOTHETICAL: NO
; US-08-734-973-14

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGCGGCGC 11
Db 2 GCGGCGGCGC 10

RESULT 104
US-08-485-573-18/c
; Sequence 18, Application US/08485573
; Patent No. 5968770
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
```

```
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,573
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-032
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; US-08-485-573-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 GGCGGCATC 14
Db 10 GGCTGCATC 2

RESULT 105
US-08-944-868A-18/c
; Sequence 18, Application US/08944868A
; Patent No. 6018025
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/944,868A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/599,654
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
```

```
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-041
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
; US-08-944-868A-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 GGCGGCATC 14
Db 10 GGCTGCATC 2

RESULT 106
US-08-944-423A-18/c
; Sequence 18, Application US/08944423A
; Patent No. 6020463
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: WINDOWS 95
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/944,423A
; FILING DATE: 06-OCT-1997
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/599,654
; FILING DATE: 09-FEB-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: JUN-07-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-105
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
```

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; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
US-08-944-423A-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATC 14
Db 10 GGCTGCATC 2

RESULT 107
US-08-757-024-678
; Sequence 678, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: NYCE, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 678:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-678

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGCGCGG 10
Db 2 GGAGGCGCG 10

RESULT 108
US-08-757-024-789
; Sequence 789, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
```

```
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 789:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-789

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GCGGCGATCG 15
Db 1 GCGGCGATCG 9

RESULT 109
US-08-925-743-18/c
; Sequence 18, Application US/08925743
; Patent No. 6054558
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/925,743
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/485,573
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
```

```
; NAME: Coruzzi, Laura A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-032
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
US-08-925-743-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCATC 14
Db 10 GGCTGCATC 2

RESULT 110
US-08-944-496-18/c
; Sequence 18, Application US/08944496
; Patent No. 6124433
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/944,496
; FILING DATE: 06-OCT-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/599,654
; FILING DATE: 09-FEB-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: CORUZZI, LAURA A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-104
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
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; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic oligonucleotide"
; HYPOTHETICAL: NO
US-08-944-496-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCATC 14
Db 10 GGCTGCATC 2

RESULT 111
US-08-925-767-18/c
; Sequence 18, Application US/08925767
; Patent No. 6225084
; GENERAL INFORMATION:
; APPLICANT: FALB, DEAN A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/925,767
; FILING DATE: 09-SEPT-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/485,573
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/386,844
; FILING DATE: 10-FEB-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Coruzzi, Laura A.
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-097
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
US-08-925-767-18

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCATC 14
Db 10 GGCTGCATC 2
```

```
RESULT 112
US-09-889-595-18/c
; Sequence 18, Application US/09889595
; Patent No. 6410749
; ORGANISM: Triticum aestivum
; GENERAL INFORMATION:
; APPLICANT: Aventis CropScience GmbH
; TITLE OF INVENTION: PROMOTERS FOR GENE EXPRESSION IN CARYOPSES OF PLANTS
; FILE REFERENCE: 514413-3885
; CURRENT APPLICATION NUMBER: US/09/889,595
; CURRENT FILING DATE: 2001-07-05
; PRIOR APPLICATION NUMBER: DE 100 32 379.0
; PRIOR FILING DATE: 2000-07-05
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Triticum aestivum
US-09-889-595-18

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2 GCGGCGCGG 10
        ||||| |||
DB      10 GCGGCGCGG 2

RESULT 113
US-10-228-876-2/c
; Sequence 2, Application US/10228876
; Patent No. 6733996
; GENERAL INFORMATION:
; APPLICANT: Froehlich, Allan C.
; APPLICANT: Lorus, Jennifer J.
; APPLICANT: Dunlap, Jay C.
; TITLE OF INVENTION: METHODS FOR REGULATING GENE EXPRESSION USING LIGHT
; FILE REFERENCE: DC-0194
; CURRENT APPLICATION NUMBER: US/10/228,876
; CURRENT FILING DATE: 2002-08-26
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Neurospora crassa
US-10-228-876-2

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      7 GCGGCATCG 15
        ||||| |||
DB      9 GCGGCATCG 1

RESULT 114
US-09-889-595-18/c
; Sequence 18, Application US/09889595
; Patent No. 6794559
; ORGANISM: Triticum aestivum
; GENERAL INFORMATION:
; APPLICANT: Aventis CropScience GmbH
; TITLE OF INVENTION: Promoters for gene expression in caryopses of plants
; FILE REFERENCE: 514413-3885
; CURRENT APPLICATION NUMBER: US/09/889,595
; CURRENT FILING DATE: 2001-07-05
; PRIOR APPLICATION NUMBER: DE 100 32 379.0
; PRIOR FILING DATE: 2000-07-05
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 18

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2 GCGGCGCGG 10
        ||||| |||
DB      10 GCGGCGCGG 2

RESULT 115
US-09-093-972C-678
; Sequence 678, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: NYce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICION, ALLERGY (IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Anzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 678:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 678:
US-09-093-972C-678

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2 GCGGCGCGG 10
        ||||| |||
DB      10 GCGGCGCGG 2
```

Db 2 GGAGGCGG 10

RESULT 116
US-09-093-972C-789
; Sequence 789, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 789:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 789:
US-09-093-972C-789

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GGCGCATCG 15
Db 1 GGCGCATCG 9

RESULT 117
US-09-875-453B-194
; Sequence 194, Application US/09875453B
; Patent No. 6838556
; GENERAL INFORMATION:
; APPLICANT: Kim, Jungshuh P.
; APPLICANT: Starr, Douglas B.
; APPLICANT: Tam, Albert W.

; APPLICANT: Laurance, Megan E.
; APPLICANT: Michelotti, Emil F.
; APPLICANT: Velligan, Mark D.
; APPLICANT: Latour, Derek R.
; APPLICANT: Thomas, Rita L.
; APPLICANT: Kongpachith, Ana
; APPLICANT: Sheppard, Liana T.
; APPLICANT: Lim, Moon Young
; APPLICANT: Bruice, Thomas W.
; TITLE OF INVENTION: PROMOTERS FOR REGULATED GENE EXPRESSION
; FILE REFERENCE: 54600-8135.US00
; CURRENT APPLICATION NUMBER: US/09/875,453B
; CURRENT FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/209,549
; PRIOR FILING DATE: 2000-06-06
; NUMBER OF SEQ ID NOS: 246
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 194
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mutated sequence
US-09-875-453B-194

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGCGG 10
Db 1 GGCGGCGG 9

RESULT 118
US-07-868-353A-36
; Sequence 36, Application US/07868353A
; Patent No. 5688662
; GENERAL INFORMATION:
; APPLICANT: Margolskee, Robert F.
; TITLE OF INVENTION: Gustducin Materials and Methods
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
; ADDRESSEE: Bicknell
; STREET: Two First National Plaza, 20 South Clark
; STREET: Street
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/868,353A
; FILING DATE: 19920409
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5688662and, Greta E.
; REGISTRATION NUMBER: P-35,302
; REFERENCE/DOCKET NUMBER: 28038/30793
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312) 346-5750
; TELEFAX: (312) 984-9740
; TELEX: 25-3856
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single


```
;
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-07-868-353A-36

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 GGGCGGC 11
Db 1 GGGCGGC 7

RESULT 119
US-08-407-804-45
; Sequence 45, Application US/08407804
; Patent No. 5817759
; GENERAL INFORMATION:
; APPLICANT: Margolskee, Robert F.
; TITLE OF INVENTION: Gustducin Materials and Methods
; NUMBER OF SEQUENCES: 46
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
; ADDRESSEE: Borun
; STREET: 6300 Sears Tower, 233 S. Wacker Drive
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/407,804
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/045,801
; FILING DATE: 09-APR-1992
; ATTORNEY/AGENT INFORMATION:
; APPLICATION NUMBER: US 07/868/353
; FILING DATE:
; FILING DATE: 09-APR-1992
; NAME: No. 5817759and, Greta E.
; REGISTRATION NUMBER: 35,302
; REFERENCE/DOCKET NUMBER: 31342
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312) 474-6300
; TELEFAX: (312) 474-0448
; TELEX:
; INFORMATION FOR SEQ ID NO: 45:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-407-804-45

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 GGGCGGC 11
Db 1 GGGCGGC 7

RESULT 120
US-08-477-396A-11/c
; Sequence 11, Application US/08477396A
; Patent No. 5872235
```

```
;
; GENERAL INFORMATION:
; APPLICANT: Chen, Ian Bo
; APPLICANT: Bao, Shideng
; APPLICANT: Liu, Yuan
; TITLE OF INVENTION: A NOVEL TUMOR MARKER AND NOVEL METHOD OF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Weingarten, Schurgin, Gagnebin & Hayes
; STREET: Ten Post Office Square
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/477,396A
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/146,488
; FILING DATE: 29-OCT-1993
; APPLICATION NUMBER: US 08/448,388
; FILING DATE: 28-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/12502
; FILING DATE: 31-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Heine, Holliday C.
; REGISTRATION NUMBER: 34,346
; REFERENCE/DOCKET NUMBER: DFCI-333BX
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-2290
; TELEFAX: (617) 451-0313
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
US-08-477-396A-11

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGGCGGC 7
Db 10 CGGCGGC 4

RESULT 121
US-08-460-751-34/c
; Sequence 34, Application US/08460751
; Patent No. 5891628
; GENERAL INFORMATION:
; APPLICANT: Redders, Stephen
; APPLICANT: Schneider, Michael
; APPLICANT: Gluckemarm, Sandra
; TITLE OF INVENTION: IDENTIFICATION OF POLYCYSTIC KIDNEY
; NUMBER OF SEQUENCES: 35
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
```


RESULT 124
US-08-757-024-854
; Sequence 854, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: NYCE, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 854:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-854

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGC 8
DB 3 GCGGGC 9

RESULT 125
US-08-757-024-864
; Sequence 864, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: NYCE, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024

; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 864:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-864

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGC 8
DB 2 GCGGGC 8

RESULT 126
US-08-757-024-873
; Sequence 873, Application US/08757024
; Patent No. 6025339
; GENERAL INFORMATION:
; APPLICANT: NYCE, Jonathan W.
; TITLE OF INVENTION: METHOD OF TREATMENT FOR ASTHMA
; NUMBER OF SEQUENCES: 952
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BELL, SELTZER, PARK & GIBSON
; STREET: P.O. Drawer 34009
; CITY: Charlotte
; STATE: No. 6025339th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,024
; FILING DATE: 26-NOV-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5218-41
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-881-3140
; TELEFAX: 919-881-3175
; TELEX: 575102
; INFORMATION FOR SEQ ID NO: 873:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-024-873

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGC 8
Db 1 GCGCGGC 7

RESULT 127

US-08-476-705A-8
; Sequence 8, Application US/08476705A
; Patent No. 6083755
; GENERAL INFORMATION:
; APPLICANT: Podolsky, Daniel K.
; TITLE OF INVENTION: INTESTINAL TREFOIL PROTEINS
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/476,705A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meiklejohn, Ph.D., Anita L
; REGISTRATION NUMBER: 35,283
; REFERENCES/DOCKET NUMBER: 00786/066004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-476-705A-8

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GCGCGGC 11
Db 1 GCGCGGC 7

RESULT 128

US-09-063-450-31/c
; Sequence 31, Application US/09063450
; Patent No. 6109776
; GENERAL INFORMATION:
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Method and System for Computationally Identifying
; TITLE OF INVENTION: Clusters Within a Set of Sequences
; FILE REFERENCE: 77001.002
; CURRENT APPLICATION NUMBER: US/09/063,450
; CURRENT FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 31
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: example
; OTHER INFORMATION: sequence illustrating a computational methodology

US-09-063-450-31

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 10 GCATCGT 16
Db 9 GCATCGT 3

RESULT 129

US-08-631-469B-4
; Sequence 4, Application US/08631469B
; Patent No. 6221840
; GENERAL INFORMATION:
; APPLICANT: Daniel K. Podolsky
; TITLE OF INVENTION: INTESTINAL TREFOIL PROTEINS
; NUMBER OF SEQUENCES: 20
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/631,469B
; FILING DATE: 12-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/631,469
; FILING DATE: 12-APR-1996
; APPLICATION NUMBER: 08/191,352
; FILING DATE: 02-FEB-1994
; APPLICATION NUMBER: 08/037,741
; FILING DATE: 25-MAR-1993
; APPLICATION NUMBER: 07/837,192
; FILING DATE: 13-FEB-1992
; APPLICATION NUMBER: 07/655,965
; FILING DATE: 14-FEB-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Meiklejohn, Ph.D., Anita L.
; REGISTRATION NUMBER: 35,283
; REFERENCES/DOCKET NUMBER: 00786/322001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; TELEX: 200107
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-08-631-469B-4

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GCGCGGC 11
Db 1 GCGCGGC 7

RESULT 130

US-09-255-432-5/c

```
; Sequence 5, Application US/09255432
; Patent No. 6258537
; GENERAL INFORMATION:
; APPLICANT: Keinath, et al.
; TITLE OF INVENTION: Method of Diagnosing Gummy Stem Blight in
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Judy C. Jarecki-Black, Ph.D.
; ADDRESSEE: Dority & Manning, P.A.
; STREET: 700 E. No. 6258537th Street, Suite 15
; CITY: Greenville
; STATE: South Carolina
; COUNTRY: USA
; ZIP: 29601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS Dos; Windows 95
; SOFTWARE: WordPerfect 6.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/255,432
; FILING DATE: Filed Herewith
; CLASSIFICATION:
; PRIOR APPLICATION DATA: Claims Priority to Provisional Application
; ATTORNEY/AGENT INFORMATION:
; NAME: Judy C. Jarecki-Black, Ph.D.
; REGISTRATION NUMBER: P44,170
; REFERENCE/DOCKET NUMBER: CXU-291
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (864) 271-1592
; TELEFAX: (864) 233-7342
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 Pairs
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; MOLECULE TYPE: Other Nucleic Acid
; DESCRIPTION: Oligonucleotide Primer
; HYPOTHETICAL: No
; ANTI-SENSE: No
; ORIGINAL SOURCE: Operon Technologies (Alameda, CA)
; IMMEDIATE SOURCE: Operon Technologies
; POSITION IN GENOME: No. 6258537 Applicable
; UNITS:
; FEATURE:
; OTHER INFORMATION: Commercially Available Primer
; PUBLICATION INFORMATION: No. 6258537 Applicable
; US-09-255-432-5

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 GCGGCAT 13
Db 8 GCGGCAT 2

RESULT 131
US-09-056-868B-5
; Sequence 5, Application US/09056868B
; GENERAL INFORMATION:
; APPLICANT: Podolsky, Daniel K.
; TITLE OF INVENTION: INTRESTINAL TREFOIL PROTEINS
; FILE REFERENCE: 00786-066005
; CURRENT APPLICATION NUMBER: US/09/056,868B
; CURRENT FILING DATE: 1998-01-27
; PRIOR APPLICATION NUMBER: US 08/476,705
; PRIOR FILING DATE: 1995-06-07
; PRIOR APPLICATION NUMBER: US 08/191,352
; PRIOR FILING DATE: 1994-02-02

Plants Usi

; Sequence 5, Application US/09313434C-5
; Patent No. 6525018
; GENERAL INFORMATION:
; APPLICANT: Podolsky, Daniel K.
; TITLE OF INVENTION: Intestinal Trefoil Proteins
; FILE REFERENCE: 50206/432001
; CURRENT APPLICATION NUMBER: US/09/313,434C
; CURRENT FILING DATE: 1999-05-17
; PRIOR APPLICATION NUMBER: US 08/631,469
; PRIOR FILING DATE: 1996-04-12
; PRIOR APPLICATION NUMBER: US 08/191,352
; PRIOR FILING DATE: 1994-02-02
; PRIOR APPLICATION NUMBER: US 08/037,741
; PRIOR FILING DATE: 1993-03-25
; PRIOR APPLICATION NUMBER: US 07/837,192
; PRIOR FILING DATE: 1992-02-13
; PRIOR APPLICATION NUMBER: US 07/655,965
; PRIOR FILING DATE: 1991-02-14
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for PCR
; US-09-313-434C-5

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGC 11
Db 1 GGGCGGC 7

RESULT 132
US-09-313-434C-5
; Sequence 5, Application US/09313434C
; Patent No. 6525018
; GENERAL INFORMATION:
; APPLICANT: Podolsky, Daniel K.
; TITLE OF INVENTION: Intestinal Trefoil Proteins
; FILE REFERENCE: 50206/432001
; CURRENT APPLICATION NUMBER: US/09/313,434C
; CURRENT FILING DATE: 1999-05-17
; PRIOR APPLICATION NUMBER: US 08/631,469
; PRIOR FILING DATE: 1996-04-12
; PRIOR APPLICATION NUMBER: US 08/191,352
; PRIOR FILING DATE: 1994-02-02
; PRIOR APPLICATION NUMBER: US 08/037,741
; PRIOR FILING DATE: 1993-03-25
; PRIOR APPLICATION NUMBER: US 07/837,192
; PRIOR FILING DATE: 1992-02-13
; PRIOR APPLICATION NUMBER: US 07/655,965
; PRIOR FILING DATE: 1991-02-14
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for PCR
; US-09-313-434C-5

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGC 11
Db 1 GGGCGGC 7

RESULT 133
US-09-508-753B-226
; Sequence 226, Application US/09508753B
; Patent No. 6544736
; GENERAL INFORMATION:
; APPLICANT: Akira SHIMAMOTO
; APPLICANT: Yasuhiro FURUICHI
; APPLICANT: YUKO SHIBATA
; APPLICANT: HIROKO FUNAKI
```

APPLICANT: Eiji OHARA
APPLICANT: Masanori WATAHIKI
TITLE OF INVENTION: Method for Synthesizing cDNA from mRNA sample
FILE REFERENCE: 00162/HG
CURRENT APPLICATION NUMBER: US/09/508,753B
CURRENT FILING DATE: 2000-06-16
PRIOR APPLICATION NUMBER: JP 9/270324
PRIOR FILING DATE: 1997-09-18
NUMBER OF SEQ ID NOS: 472
SEQ ID NO 226
LENGTH: 10
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-508-753B-226

Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 GGCATCG 15
Db 4 GGCATCG 10
|||||

RESULT 134
US-09-758-073-5/c
Sequence 5, Application US/09758073
Patent No. 6610487
GENERAL INFORMATION:
APPLICANT: Keinath, et al.
TITLE OF INVENTION: Method of Diagnosing Gummy Stem Blight in
TITLE OF INVENTION: Plants Using a Polymerase Chain Reaction Assay
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSES: Judy C. Jarecki-Black, Ph.D.
ADDRESSES: Dority & Manning, P.A.
STREET: 700 E. No. 6610487th Street, Suite 15
CITY: Greenville
STATE: South Carolina
COUNTRY: USA
ZIP: 29601
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS Dos; Windows 95
SOFTWARE: WordPerfect 6.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/758,073
FILING DATE: Filed Herewith
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/078,103
FILING DATE: 16-MAR-1998
ATTORNEY/AGENT INFORMATION:
NAME: Judy C. Jarecki-Black, Ph.D.
REGISTRATION NUMBER: P44,170
REFERENCE/DOCKET NUMBER: CXU-291
TELECOMMUNICATION INFORMATION:
TELEPHONE: (864) 271-1592
TELEFAX: (864) 233-7342
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 Pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
MOLECULE TYPE: Other Nucleic Acid
DESCRIPTION: Oligonucleotide Primer
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE: Operon Technologies (Alameda, CA)

IMMEDIATE SOURCE: Operon Technologies
POSITION IN GENOME: No. 6610487 Applicable
UNITS:
FEATURE:
OTHER INFORMATION: Commercially Available Primer
PUBLICATION INFORMATION: No. 6610487 Applicable
US-09-758-073-5
Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 7 GCGGCAT 13
Db 8 GCGGCAT 2
|||||
RESULT 135
US-09-093-972C-843
Sequence 843, Application US/09093972C
Patent No. 6825174
GENERAL INFORMATION:
APPLICANT: Nyce, Jonathan W.
TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
& TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
BRONCHOCOUSTRICTION, ALLERGY(IES) & INFLAMMATION
NUMBER OF SEQUENCES: 996
CORRESPONDENCE ADDRESS:
ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
STREET: 7 Clarke Drive
CITY: Cranbury
STATE: New Jersey
COUNTRY: USA
ZIP: 08512
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/093,972C
FILING DATE: 09-Jun-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 08/757,024
FILING DATE: 26-11-1996
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 09/016,464
FILING DATE: 30-January-1998
ATTORNEY/AGENT INFORMATION:
NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: EPI-00672
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-409-3035
TELEFAX: 413-254-9245
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 843:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 843:
US-09-093-972C-843
Query Match 43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      2 GGCGGGC 8
      |||||
Db      4 GGCGGGC 10

RESULT 136
US-09-093-972C-854
; Sequence 854, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <unknown>
; INFORMATION FOR SEQ ID NO: 854:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 854:
US-09-093-972C-854

Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GGCGGGC 8
      |||||
Db      3 GGCGGGC 9

RESULT 137
US-09-093-972C-864
; Sequence 864, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA

APPLICANT: Nyce, Jonathan W.
TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
& TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION

NUMBER OF SEQUENCES: 996
CORRESPONDENCE ADDRESS:
ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
STREET: 7 Clarke Drive
CITY: Cranbury
STATE: New Jersey
COUNTRY: USA
ZIP: 08512
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/093,972C
FILING DATE: 09-Jun-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 08/757,024
FILING DATE: 26-11-1996
APPLICATION NUMBER: US 08/472,527
FILING DATE: 7-June-1995
APPLICATION NUMBER: US 09/016,464
FILING DATE: 30-January-1998
ATTORNEY/AGENT INFORMATION:
NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: EPI-00672
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-409-3035
TELEFAX: 413-254-9245
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 854:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 854:
US-09-093-972C-854

Query Match      43.8%; Score 7; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GGCGGGC 8
      |||||
Db      3 GGCGGGC 9

RESULT 138
US-09-093-972C-873
; Sequence 873, Application US/09093972C
; Patent No. 6825174
; GENERAL INFORMATION:
; APPLICANT: Nyce, Jonathan W.
; TITLE OF INVENTION: COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION
; & TREATMENT OF DISEASES & CONDITIONS ASSOCIATED WITH
; BRONCHOCONSTRICTION, ALLERGY(IES) & INFLAMMATION
;
; NUMBER OF SEQUENCES: 996
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; CITY: Cranbury
; STATE: New Jersey
; COUNTRY: USA
```

```

;
; ZIP: 08512
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/093,972C
; FILING DATE: 09-Jun-1998
; CLASSIFICATION: <Unknown>
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 08/757,024
; FILING DATE: 26-11-1996
; APPLICATION NUMBER: US 08/472,527
; FILING DATE: 7-June-1995
; APPLICATION NUMBER: US 09/016,464
; FILING DATE: 30-January-1998
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-00672
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 609-409-3035
; TELEFAX: 413-254-9245
; TELEX: <Unknown>
;
; INFORMATION FOR SEQ ID NO: 873:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 10 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
; MOLECULE TYPE: DNA (genomic)
;
; SEQUENCE DESCRIPTION: SEQ ID NO: 873:
;
; US-09-093-972C-873
;
;
; Query Match 43.8%; Score 7; DB 1; Length 10;
; Best Local Similarity 100.0%; Pred. No. 77;
; Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; Qy 2 GCGGGGC 8
; Db 1 GCGGGGC 7
;
;
; RESULT 139
; US-09-263-790-32/c
; Sequence 32, Application US/09263790
; Patent No. PP12997
;
; GENERAL INFORMATION:
; APPLICANT: Nitral Kumar PATRA et al.
; TITLE OF INVENTION: JAL PALLAVI, WATER LOGGING TOLERANT CYMBOPOGON WINTERIANUS
; FILE REFERENCE: 2761-0120P
; CURRENT APPLICATION NUMBER: US/09/263,790
; CURRENT FILING DATE: 1999-03-05
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.0
;
; SEQ ID NO 32
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial
;
; FEATURE:
; OTHER INFORMATION: OPT 14 Primer - Used to develop the unique RAPD profiles of the
; OTHER INFORMATION: plant Jal Pallavi
;
; US-09-263-790-32
;
; Query Match 43.8%; Score 7; DB 1; Length 10;
; Best Local Similarity 100.0%; Pred. No. 77;
; Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; Qy 7 GCGGCAT 13
; Db 1 GCGGCAT 13

```


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OM nucleic - nucleic search, using sw model

Run on: May 9, 2006, 16:45:21 ; Search time 0.001 Seconds
(without alignments)
245.664 Million cell updates/sec

Title: US-09-904-968A-20-COPY
Perfect score: 16
Sequence: 1 cggcggcgccatcgt 16

Scoring table: IDENTITY NUC
Gapop 10.0, Gapext 0.5

Searched: 692 seqs, 7677 residues

Total number of hits satisfying chosen parameters: 1384

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 693 summaries

Database : ngsdb20.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	12.4	77.5	14	1	AA030246 Human PKD1 gene mu
3	11.4	71.2	15	1	AA030246 Human PKD1 gene mu
4	11.4	71.2	16	1	AA030246 Human PKD1 gene mu
5	11.4	71.2	16	1	AA030246 Human PKD1 gene mu
6	11	68.8	15	1	AA030246 Human PKD1 gene mu
7	11	68.8	15	1	AA030246 Human PKD1 gene mu
8	11	68.8	15	1	AA030246 Human PKD1 gene mu
9	11	68.8	15	1	AA030246 Human PKD1 gene mu
10	11	68.8	15	1	AA030246 Human PKD1 gene mu
11	10.8	67.5	14	1	AA030246 Human PKD1 gene mu
12	10.8	67.5	14	1	AA030246 Human PKD1 gene mu
13	10.8	67.5	14	1	AA030246 Human PKD1 gene mu
14	10.8	67.5	14	1	AA030246 Human PKD1 gene mu
15	10.8	67.5	14	1	AA030246 Human PKD1 gene mu
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20	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
21	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
22	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
23	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
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25	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
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27	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
28	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
29	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
30	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
31	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
32	10.8	67.5	15	1	AA030246 Human PKD1 gene mu
33	10.8	67.5	15	1	AA030246 Human PKD1 gene mu

34	10.8	67.5	15	1	ABD18715 Human adenosine A1
35	10.8	67.5	15	1	ABD18694 Human adenosine A1
36	10.4	65.0	12	1	AAV47234 Antisense oligonuc
37	10.4	65.0	12	1	AAV47234 Antisense oligonuc
38	10.4	65.0	12	1	AAV47234 Antisense oligonuc
39	10.4	65.0	12	1	AAV47234 Antisense oligonuc
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70	10.4	65.0	12	1	AAV47234 Antisense oligonuc
71	10	62.5	10	1	AAV47234 Antisense oligonuc
72	10	62.5	10	1	AAV47234 Antisense oligonuc
73	10	62.5	10	1	AAV47234 Antisense oligonuc
74	10	62.5	10	1	AAV47234 Antisense oligonuc
75	10	62.5	10	1	AAV47234 Antisense oligonuc
76	10	62.5	10	1	AAV47234 Antisense oligonuc
77	10	62.5	10	1	AAV47234 Antisense oligonuc
78	10	62.5	10	1	AAV47234 Antisense oligonuc
79	10	62.5	10	1	AAV47234 Antisense oligonuc
80	10	62.5	10	1	AAV47234 Antisense oligonuc
81	10	62.5	10	1	AAV47234 Antisense oligonuc
82	10	62.5	10	1	AAV47234 Antisense oligonuc
83	10	62.5	10	1	AAV47234 Antisense oligonuc
84	10	62.5	10	1	AAV47234 Antisense oligonuc
85	10	62.5	10	1	AAV47234 Antisense oligonuc
86	10	62.5	10	1	AAV47234 Antisense oligonuc
87	10	62.5	10	1	AAV47234 Antisense oligonuc
88	10	62.5	10	1	AAV47234 Antisense oligonuc
89	10	62.5	10	1	AAV47234 Antisense oligonuc
90	10	62.5	10	1	AAV47234 Antisense oligonuc
91	10	62.5	10	1	AAV47234 Antisense oligonuc
92	10	62.5	10	1	AAV47234 Antisense oligonuc
93	10	62.5	10	1	AAV47234 Antisense oligonuc
94	10	62.5	10	1	AAV47234 Antisense oligonuc
95	10	62.5	10	1	AAV47234 Antisense oligonuc
96	10	62.5	10	1	AAV47234 Antisense oligonuc
97	10	62.5	10	1	AAV47234 Antisense oligonuc
98	10	62.5	10	1	AAV47234 Antisense oligonuc
99	10	62.5	10	1	AAV47234 Antisense oligonuc
100	10	62.5	10	1	AAV47234 Antisense oligonuc
101	10	62.5	10	1	AAV47234 Antisense oligonuc
102	10	62.5	10	1	AAV47234 Antisense oligonuc
103	10	62.5	10	1	AAV47234 Antisense oligonuc
104	10	62.5	10	1	AAV47234 Antisense oligonuc
105	10	62.5	10	1	AAV47234 Antisense oligonuc
106	10	62.5	10	1	AAV47234 Antisense oligonuc

c 107	10	62.5	14	1	AAF20699	Human C/EBP polynu	180	9.4	58.7	12	1	ADW87042	Protein labelling
c 108	10	62.5	14	1	ABZ96393	Human C/EBP antise	181	9.4	58.7	12	1	ADW86861	Protein labelling
c 109	10	62.5	14	1	ADW20302	Human C/EBP DNA F	182	9.4	58.7	12	1	ADW86936	Protein labelling
110	9.8	61.2	13	1	AAV47253	Antisense oligonuc	183	9.4	58.7	12	1	ADW86870	Protein labelling
111	9.8	61.2	13	1	AAW53630	Human adenosine A1	184	9.4	58.7	12	1	ADW86922	Protein labelling
112	9.8	61.2	13	1	AAA33073	Low adenosine anti	185	9.4	58.7	12	1	ADW86926	Protein labelling
113	9.8	61.2	13	1	AAA03432	Human adenosine A1	186	9.4	58.7	12	1	ADW86874	Protein labelling
114	9.8	61.2	13	1	AAF19195	Human adenosine A1	187	9.4	58.7	12	1	ADW86985	Protein labelling
115	9.8	61.2	13	1	ABZ94889	Human adenosine A1	c 188	9.4	58.7	12	1	ADW87140	Dog Lafora body di
116	9.8	61.2	13	1	ABD18737	Human adenosine A1	189	9.4	58.7	13	1	AAV47290	Antisense oligonuc
117	9.8	61.2	14	1	AAV47252	Antisense oligonuc	190	9.4	58.7	13	1	AAV47272	Antisense oligonuc
118	9.8	61.2	14	1	AAW53629	Human adenosine A1	191	9.4	58.7	13	1	AAV47190	Antisense oligonuc
119	9.8	61.2	14	1	AAA33072	Low adenosine anti	192	9.4	58.7	13	1	AAW53649	Human adenosine A1
c 120	9.8	61.3	14	1	AAZ64806	Substrate for hair	193	9.4	58.7	13	1	AAW53667	Human adenosine A1
121	9.8	61.2	14	1	AAA03431	Human adenosine A1	194	9.4	58.7	13	1	AAW53567	Human adenosine A1
122	9.8	61.2	14	1	AAF19194	Human adenosine A1	195	9.4	58.7	13	1	AAA33092	Low adenosine anti
c 123	9.8	61.3	14	1	ABX01643	Hepatitis C virus	196	9.4	58.7	13	1	AAA33110	Low adenosine anti
c 124	9.8	61.3	14	1	ABZ76567	Hepatitis C virus	197	9.4	58.7	13	1	AAA33010	Low adenosine anti
125	9.8	61.2	14	1	ABZ94888	Human adenosine A1	198	9.4	58.7	13	1	AAA03369	Human adenosine A1
126	9.8	61.2	14	1	ABD18736	Human adenosine A1	199	9.4	58.7	13	1	AAA03469	Human adenosine A1
127	9.4	58.7	11	1	AAV47255	Antisense oligonuc	200	9.4	58.7	13	1	AAA03451	Human adenosine A1
128	9.4	58.7	11	1	AAV47235	Antisense oligonuc	201	9.4	58.7	13	1	AAF19232	Human adenosine A1
129	9.4	58.7	11	1	AAV47292	Antisense oligonuc	202	9.4	58.7	13	1	AAF19132	Human adenosine A1
130	9.4	58.7	11	1	AAW53632	Human adenosine A1	203	9.4	58.7	13	1	AAF19214	Human adenosine A1
131	9.4	58.7	11	1	AAW53612	Human adenosine A1	204	9.4	58.7	13	1	ABH27202	Oligonucleotide SE
132	9.4	58.7	11	1	AAW53669	Human adenosine A1	c 205	9.4	58.7	13	1	ABH27203	Oligonucleotide SE
133	9.4	58.7	11	1	AAA33112	Low adenosine anti	206	9.4	58.7	13	1	ABZ94826	Human adenosine A1
134	9.4	58.7	11	1	AAA33075	Low adenosine anti	207	9.4	58.7	13	1	ABZ94926	Human adenosine A1
135	9.4	58.7	11	1	AAA33055	Low adenosine anti	208	9.4	58.7	13	1	ABZ94908	Human adenosine A1
136	9.4	58.7	11	1	AAA03471	Human adenosine A1	209	9.4	58.7	13	1	ABD18674	Human adenosine A1
137	9.4	58.7	11	1	AAA03434	Human adenosine A1	210	9.4	58.7	13	1	ABD18756	Human adenosine A1
138	9.4	58.7	11	1	AAA03414	Human adenosine A1	211	9.4	58.7	13	1	ABD18774	Human adenosine A1
139	9.4	58.7	11	1	AAF19177	Human adenosine A1	212	9.4	58.7	13	1	ADW86981	Protein labelling
140	9.4	58.7	11	1	AAF19234	Human adenosine A1	213	9.2	57.5	10	1	AAA34728	Human adenosine re
141	9.4	58.7	11	1	AAF19197	Human adenosine A1	214	9.2	57.5	10	1	AAF20850	Human adenosine A1
142	9.4	58.7	11	1	ABZ94891	Human adenosine A1	215	9.2	57.5	10	1	ABZ96544	Human adenosine A1
143	9.4	58.7	11	1	ABZ94928	Human adenosine A1	216	9.2	57.5	10	1	ABZ96544	Human adenosine A1
144	9.4	58.7	11	1	ABZ94871	Human adenosine A1	217	9	56.2	10	1	AAV47275	Antisense oligonuc
145	9.4	58.7	11	1	ABD18739	Human adenosine A1	218	9	56.2	10	1	AAV47293	Antisense oligonuc
146	9.4	58.7	11	1	ABD18719	Human adenosine A1	219	9	56.2	10	1	AAW53652	Human adenosine A1
147	9.4	58.7	11	1	ABD18776	Human adenosine A1	220	9	56.2	10	1	AAW53670	Human adenosine A1
c 148	9.4	58.7	12	1	AAQ47316	Factor X inhibitor	221	9	56.2	10	1	AAA33113	Low adenosine anti
149	9.4	58.7	12	1	AAV47291	Antisense oligonuc	222	9	56.2	10	1	AAA33095	Low adenosine anti
150	9.4	58.7	12	1	AAV47213	Antisense oligonuc	223	9	56.2	10	1	AAA03472	Human adenosine A1
151	9.4	58.7	12	1	AAV47273	Antisense oligonuc	224	9	56.2	10	1	AAA03454	Human adenosine A1
152	9.4	58.7	12	1	AAV47254	Antisense oligonuc	225	9	56.2	10	1	AAF19217	Human adenosine A1
153	9.4	58.7	12	1	AAW53650	Human adenosine A1	c 226	9	56.2	10	1	ABL60198	Human MUC1 PCR pri
154	9.4	58.7	12	1	AAW53668	Human adenosine A1	227	9	56.2	10	1	ABZ94929	Human adenosine A1
155	9.4	58.7	12	1	AAW53590	Human adenosine A1	228	9	56.2	10	1	ABZ94911	Human adenosine A1
156	9.4	58.7	12	1	AAW53631	Human adenosine A1	229	9	56.2	10	1	ABD17983	Human adenosine A1
157	9.4	58.7	12	1	AAA33074	Low adenosine anti	230	9	56.2	10	1	ABD18759	Human adenosine A1
158	9.4	58.7	12	1	AAA33111	Low adenosine anti	231	9	56.2	10	1	ABD18777	Human adenosine A1
159	9.4	58.7	12	1	AAA33033	Low adenosine anti	232	9	56.2	11	1	AAV47274	Antisense oligonuc
160	9.4	58.7	12	1	AAA33093	Low adenosine anti	233	9	56.2	11	1	AAW53651	Human adenosine A1
161	9.4	58.7	12	1	AAA03392	Human adenosine A1	234	9	56.2	11	1	AAA33094	Low adenosine anti
162	9.4	58.7	12	1	AAA03452	Human adenosine A1	235	9	56.2	11	1	AAA03453	Human adenosine A1
163	9.4	58.7	12	1	AAA03470	Human adenosine A1	236	9	56.2	11	1	AAF19216	Human adenosine A1
164	9.4	58.7	12	1	AAA03433	Human adenosine A1	237	9	56.2	11	1	AAA70570	Spl binding site a
165	9.4	58.7	12	1	AAF19233	Human adenosine A1	238	9	56.2	11	1	ABZ94910	Human adenosine A1
166	9.4	58.7	12	1	AAF19215	Human adenosine A1	239	9	56.2	11	1	ABD18758	Human adenosine A1
167	9.4	58.7	12	1	AAF19196	Human adenosine A1	c 240	9	56.2	12	1	AAV18495	Random primed reve
168	9.4	58.7	12	1	AAF19155	Human adenosine A1	241	9	56.2	12	1	ABZ12886	Oligonucleotide pr
169	9.4	58.7	12	1	ABZ94890	Human adenosine A1	c 242	9	56.2	12	1	ABH69684	Oligonucleotide pr
170	9.4	58.7	12	1	ABZ94909	Human adenosine A1	c 243	9	56.2	12	1	ABH89852	Oligonucleotide pr
171	9.4	58.7	12	1	ABZ94927	Human adenosine A1	244	9	56.2	12	1	ABZ12877	Oligonucleotide pr
172	9.4	58.7	12	1	ABZ94849	Human adenosine A1	245	9	56.2	12	1	ABZ12881	Oligonucleotide pr
173	9.4	58.7	12	1	ABD18757	Human adenosine A1	246	9	56.2	12	1	ABZ12885	Oligonucleotide pr
174	9.4	58.7	12	1	ABD18775	Human adenosine A1	c 247	9	56.2	12	1	ADA37069	Human p19 core pr
175	9.4	58.7	12	1	ABD18697	Human adenosine A1	c 248	9	56.2	12	1	ABE14348	Optineurin promote
176	9.4	58.7	12	1	ABD18738	Human adenosine A1	c 249	8.8	55.0	12	1	AAQ80639	Neisseria gonorrhoe
177	9.4	58.7	12	1	ADR46953	Mouse cystin (Cys1	c 250	8.8	55.0	12	1	AAA53932	Oligonucleotide l1
178	9.4	58.7	12	1	ADW86680	Protein labelling	c 251	8.8	55.0	12	1	AAF61446	Cyclin E2F1 bindin
179	9.4	58.7	12	1	ADW86848	Protein labelling	252	8.8	55.0	12	1	ABI11824	Oligonucleotide pr

C 253	8.8	55.0	12	1	ABH99704	Oligonucleotide pr
C 254	8.4	52.5	10	1	AAQ01757	Regulatory sequenc
C 255	8.4	52.5	10	1	AAQ47256	Antisense oligonuc
C 256	8.4	52.5	10	1	AAV47236	Antisense oligonuc
C 257	8.4	52.5	10	1	AAV47310	Antisense oligonuc
C 258	8.4	52.5	10	1	AAV53687	Human adenosine A1
C 259	8.4	52.5	10	1	AAV53633	Human adenosine A1
C 260	8.4	52.5	10	1	AAV53613	Human adenosine A1
C 261	8.4	52.5	10	1	AAV33130	Human adenosine A1
C 262	8.4	52.5	10	1	AAV33056	Low adenosine anti
C 263	8.4	52.5	10	1	AAV33076	Low adenosine anti
C 264	8.4	52.5	10	1	AAZ83213	Low adenosine anti
C 265	8.4	52.5	10	1	AAZ83213	Metastatic breast
C 266	8.4	52.5	10	1	AAZ83798	Metastatic breast
C 267	8.4	52.5	10	1	AAA03415	Human adenosine A1
C 268	8.4	52.5	10	1	AAA03435	Human adenosine A1
C 269	8.4	52.5	10	1	AAA03489	Human adenosine A1
C 270	8.4	52.5	10	1	AAF19178	Human adenosine A1
C 271	8.4	52.5	10	1	AAF19252	Human adenosine A1
C 272	8.4	52.5	10	1	AAF19198	Human adenosine A1
C 273	8.4	52.5	10	1	AAF43209	Human adenosine A1
C 274	8.4	52.5	10	1	AAV598392	Yeast NORF gene SA
C 275	8.4	52.5	10	1	ABQ72321	Galanin receptor g
C 276	8.4	52.5	10	1	ABN88031	Human CYP2D6 gene
C 277	8.4	52.5	10	1	AAV59584	Human SCYB14 prefe
C 278	8.4	52.5	10	1	AAV59591	Human CALM1 gene a
C 279	8.4	52.5	10	1	ABT16423	Human neurokinin 1
C 280	8.4	52.5	10	1	AAV58332	G6 primer used in
C 281	8.4	52.5	10	1	ABZ94892	Human adenosine A1
C 282	8.4	52.5	10	1	ABZ94946	Human adenosine A1
C 283	8.4	52.5	10	1	ABZ94872	Human adenosine A1
C 284	8.4	52.5	10	1	ABD18720	Human adenosine A1
C 285	8.4	52.5	10	1	ABD18794	Human adenosine A1
C 286	8.4	52.5	10	1	ADO26312	Human chondromedin
C 287	8.4	52.5	10	1	ADU19748	Hypoxia-related tu
C 288	8.4	52.5	10	1	ADU18460	Hypoxia-related tu
C 289	8.4	52.5	10	1	ADU20325	Hypoxia-related tu
C 290	8.4	52.5	10	1	ADU78419	Rice oligonucleoti
C 291	8.4	52.5	10	1	ADW10561	Human genomic DNA
C 292	8.4	52.5	10	1	AEA52335	Prostate cancer ge
C 293	8.4	52.5	11	1	AAV90193	Portion of substei
C 294	8.4	52.5	11	1	AAV68363	Adaptor primer oli
C 295	8.4	52.5	11	1	AAV47214	Antisense oligonuc
C 296	8.4	52.5	11	1	AAV47309	Antisense oligonuc
C 297	8.4	52.5	11	1	AAV76507	WISP PCR primer SE
C 298	8.4	52.5	11	1	AAV53686	Human adenosine A1
C 299	8.4	52.5	11	1	AAV53591	Human adenosine A1
C 300	8.4	52.5	11	1	AAV33129	Human adenosine A1
C 301	8.4	52.5	11	1	AAV33034	Low adenosine anti
C 302	8.4	52.5	11	1	AAV03393	Human adenosine A1
C 303	8.4	52.5	11	1	AAV03488	Human adenosine A1
C 304	8.4	52.5	11	1	AAV19156	Human adenosine A1
C 305	8.4	52.5	11	1	AAV19231	Human adenosine A1
C 306	8.4	52.5	11	1	AAV63866	Human adenosine A1
C 307	8.4	52.5	11	1	AAV68122	Adaptor 2 SEQ ID N
C 308	8.4	52.5	11	1	AAV68122	Human skin EST 590
C 309	8.4	52.5	11	1	ADB117604	Adaptor 2 (complem
C 310	8.4	52.5	11	1	ADD43601	Oligonucleotide du
C 311	8.4	52.5	11	1	ADP95096	Adaptor #4 used in
C 312	8.4	52.5	11	1	ADP72794	Lung cancer relate
C 313	8.4	52.5	11	1	ABZ94945	Human adenosine A1
C 314	8.4	52.5	11	1	ABZ94850	Human adenosine A1
C 315	8.4	52.5	11	1	ABD18798	Human adenosine A1
C 316	8.4	52.5	11	1	ADG93360	Human adenosine A1
C 317	8.4	52.5	11	1	ADQ26321	Phage lambda unpai
C 318	8.4	52.5	11	1	ADQ33914	Human chondromedin
C 319	8.4	52.5	11	1	ADU73966	Human facial skin-
C 320	8.4	52.5	11	1	ADU59664	Adaptor lower stra
C 321	8.4	52.5	11	1	ADZ24805	Adaptor oligonucle
C 322	8.4	52.5	12	1	AAV41826	Human SNP detectio
C 323	8.4	52.5	12	1	AAV47308	HLA allele, HLA-DQ
C 324	8.4	52.5	12	1	AAV47191	Antisense oligonuc
C 325	8.4	52.5	12	1	AAV53685	Antisense oligonuc
C 326	8.4	52.5	12	1	AAV53685	Human adenosine A1
C 327	8.4	52.5	12	1	AAA33011	Human adenosine A1
C 328	8.4	52.5	12	1	AAA33128	Low adenosine anti
C 329	8.4	52.5	12	1	AAA10347	DNA ligand binding
C 330	8.4	52.5	12	1	AAA03487	Human adenosine A1
C 331	8.4	52.5	12	1	AAA03370	Human adenosine A1
C 332	8.4	52.5	12	1	AAV19133	Human adenosine A1
C 333	8.4	52.5	12	1	AAV19250	Human adenosine A1
C 334	8.4	52.5	12	1	ABH77607	Oligonucleotide pr
C 335	8.4	52.5	12	1	ABT22486	Oligonucleotide pr
C 336	8.4	52.5	12	1	ABT14198	Oligonucleotide pr
C 337	8.4	52.5	12	1	AAV27246	TaqI adapter, stra
C 338	8.4	52.5	12	1	ABX14213	PCR primer for dif
C 339	8.4	52.5	12	1	ABK70579	Ligand binding aff
C 340	8.4	52.5	12	1	AAI70896	Molecular beacon c
C 341	8.4	52.5	12	1	AAV45589	Competitor oligo c
C 342	8.4	52.5	12	1	ACA61747	Sample preparation
C 343	8.4	52.5	12	1	ACA61767	Sample preparation
C 344	8.4	52.5	12	1	ABZ94944	Human adenosine A1
C 345	8.4	52.5	12	1	ABZ94827	Human adenosine A1
C 346	8.4	52.5	12	1	ABD18675	Human adenosine A1
C 347	8.4	52.5	12	1	ABD18792	Human adenosine A1
C 348	8.4	52.5	12	1	ADW87050	Protein labelling
C 349	8.4	52.5	12	1	ADW86942	Protein labelling
C 350	8.4	52.5	12	1	ADW86944	Protein labelling
C 351	8.4	52.5	12	1	ADZ23915	Human SNP detectio
C 352	8.4	52.5	12	1	ADZ23911	Human SNP detectio
C 353	8.4	52.5	12	1	ADY89227	VEGF siRNA SEQ ID
C 354	8.4	52.5	12	1	ABE43971	Peptide nucleic ac
C 355	8.4	52.5	12	1	AEH43991	Oligonucleotide, S
C 356	8.4	50.0	10	1	AAV86209	SAGE tag used to i
C 357	8.4	50.0	10	1	AAZ79225	Human dendritic ce
C 358	8.4	50.0	10	1	AAZ78814	Human dendritic ce
C 359	8.4	50.0	10	1	AAZ85899	Metastatic breast
C 360	8.4	50.0	10	1	AAZ82808	Metastatic breast
C 361	8.4	50.0	10	1	AAZ84490	Metastatic breast
C 362	8.4	50.0	10	1	AAH63789	Human ubiquitously
C 363	8.4	50.0	10	1	AAH63788	Human ubiquitously
C 364	8.4	50.0	10	1	AAH63790	Human ubiquitously
C 365	8.4	50.0	10	1	ABA06216	Human normal hepat
C 366	8.4	50.0	10	1	AAH39166	Yeast NORF gene SA
C 367	8.4	50.0	10	1	AAH76352	Z. mays Ms45 promo
C 368	8.4	50.0	10	1	AAI72712	Complement #2 of H
C 369	8.4	50.0	10	1	ABQ71300	Zinc finger protei
C 370	8.4	50.0	10	1	ABQ71696	Zinc finger protei
C 371	8.4	50.0	10	1	ABQ71697	Zinc finger protei
C 372	8.4	50.0	10	1	ABQ71543	Zinc finger protei
C 373	8.4	50.0	10	1	ABQ72322	Human CYP2D6 gene
C 374	8.4	50.0	10	1	ABV78512	Human Th1 cell pre
C 375	8.4	50.0	10	1	AAV39540	CCBP2 detecting AS
C 376	8.4	50.0	10	1	ABT14383	Nucleic acid PCR a
C 377	8.4	50.0	10	1	ADA63306	Zinc finger target
C 378	8.4	50.0	10	1	ADA63717	Zinc finger target
C 379	8.4	50.0	10	1	ADA62130	Zinc finger target
C 380	8.4	50.0	10	1	ADA63718	Zinc finger target
C 381	8.4	50.0	10	1	ADM22215	Synthetic zinc fin
C 382	8.4	50.0	10	1	ADM21510	Synthetic zinc fin
C 383	8.4	50.0	10	1	ADM22216	Synthetic zinc fin
C 384	8.4	50.0	10	1	ADM20334	Synthetic zinc fin
C 385	8.4	50.0	10	1	ADJ65133	N. crassa frq gene
C 386	8.4	50.0	10	1	ADN89074	Hyperlipidemia tre
C 387	8.4	50.0	10	1	ADN89081	Hyperlipidemia tre
C 388	8.4	50.0	10	1	ADN89083	Hyperlipidemia tre
C 389	8.4	50.0	10	1	ADS76957	Breast cancer dete
C 390	8.4	50.0	10	1	ADS76907	Breast cancer dete
C 391	8.4	50.0	10	1	ADS76908	Breast cancer dete
C 392	8.4	50.0	10	1	ADU18419	Hypoxia-related tu
C 393	8.4	50.0	10	1	ADU18419	Hypoxia-related tu
C 394	8.4	50.0	10	1	ADU20349	Hypoxia-related tu
C 395	8.4	50.0	10	1	ADU19772	Hypoxia-related tu
C 396	8.4	50.0	10	1	ADU67738	Human annexin, An
C 397	8.4	50.0	11	1	AAV54772	Endothelial nitric
C 398	8.4	50.0	11	1	AAA34219	Human adenosine re

399	8	50.0	11	1	AAF20341	Human endothelial	C 472	7.4	46.3	10	1	AAF39569	Yeast NORF gene SA
400	8	50.0	11	1	ABV70698	Human skin EST 848	C 473	7.4	46.3	10	1	AAF34859	Yeast NORF gene SA
C 401	8	50.0	11	1	ABV68955	Human skin EST 674	C 474	7.4	46.3	10	1	AAF38042	Yeast NORF gene SA
402	8	50.0	11	1	ABV63277	Human skin EST 106	C 475	7.4	46.3	10	1	AAF40167	Yeast NORF gene SA
403	8	50.0	11	1	ABD96035	Human endothelial	476	7.4	46.3	10	1	AAF33464	Yeast NORF gene SA
404	8	50.0	11	1	ABD19675	Human endothelial	477	7.4	46.3	10	1	AAF40982	Yeast NORF gene SA
C 405	8	50.0	11	1	ADQ34850	Human facial skin-	C 478	7.4	46.3	10	1	AAF35961	Yeast NORF gene SA
406	7.8	48.8	11	1	ADQ71041	Half-site oligonuc	C 479	7.4	46.3	10	1	AAF33635	Yeast NORF gene SA
407	7.8	48.8	11	1	AA114738	ON-369 for random	480	7.4	46.3	10	1	AAF37745	Yeast NORF gene SA
C 408	7.8	48.8	11	1	AA191967	RNA sequence discl	C 481	7.4	46.3	10	1	AAF37745	Yeast NORF gene SA
C 409	7.8	48.8	11	1	AA502829	Human pregnane X r	482	7.4	46.3	10	1	AA598385	Galanin receptor g
410	7.8	48.8	11	1	AA502828	Human pregnane x r	483	7.4	46.3	10	1	AA598388	Galanin receptor g
C 411	7.8	48.8	11	1	ABV64705	Human skin EST 249	C 484	7.4	46.3	10	1	AA598370	Galanin receptor g
C 412	7.8	48.8	11	1	ABV63378	Human skin EST 136	C 485	7.4	46.3	10	1	AA598381	Galanin receptor g
C 413	7.8	48.8	11	1	ABV68857	Human skin EST 664	C 486	7.4	46.3	10	1	AA598391	Galanin receptor g
C 414	7.8	48.8	11	1	ABV67255	Human skin EST 504	C 487	7.4	46.3	10	1	AA261603	Human apolipoprote
C 415	7.8	48.8	11	1	ABV70999	Human skin EST 878	C 488	7.4	46.3	10	1	ABL42839	Human maturation/a
C 416	7.8	48.8	11	1	AA140464	Maxizyme related h	C 489	7.4	46.3	10	1	ABL42679	Human G protein-co
C 417	7.8	48.8	11	1	AD116098	Neisseria meningit	490	7.4	46.3	10	1	ABK70551	Human MUC1 PCR pri
C 418	7.8	48.8	11	1	ADQ35287	Human hair-bearing	491	7.4	46.3	10	1	ABL60208	Human endothelin 2
C 419	7.8	48.8	11	1	ADQ35284	Human hair-bearing	492	7.4	46.3	10	1	RAD26185	Human E2F3 primer-
C 420	7.8	48.8	11	1	ADQ32529	Human facial skin-	493	7.4	46.3	10	1	ABL39511	Zinc finger protei
C 421	7.8	48.8	11	1	AD224803	Human SNP detectio	C 494	7.4	46.3	10	1	ABQ71550	Human CFL1 primer
422	7.4	46.3	10	1	AAV47326	Antisense oligonuc	C 495	7.4	46.3	10	1	ABQ88691	Human GSR preferre
423	7.4	46.3	10	1	AAV47326	Antisense oligonuc	C 496	7.4	46.3	10	1	ABN80652	Human GSR preferre
424	7.4	46.3	10	1	AAV50247	Yeast tag for addi	C 497	7.4	46.3	10	1	ABN87961	Human ribosomal pr
C 425	7.4	46.3	10	1	AAV77470	US912147 primer 1	C 498	7.4	46.3	10	1	ABV78361	Human ribosomal pr
C 426	7.4	46.3	10	1	AAV81843	Human interleukin-	C 499	7.4	46.3	10	1	ABV78320	Human ribosomal pr
427	7.4	46.3	10	1	AAV53703	Human adenosine A1	500	7.4	46.3	10	1	ABV84846	Human ribosomal pr
428	7.4	46.3	10	1	AAV53703	Human adenosine A1	C 501	7.4	46.3	10	1	ABV84871	Human chronic hepa
C 429	7.4	46.3	10	1	AAV26257	Forward primer OPE	C 502	7.4	46.3	10	1	ABL52028	Human SLC18A2 pref
430	7.4	46.3	10	1	AAV28077	Human FKHL7 DNA fr	C 503	7.4	46.3	10	1	ABK96613	Human interleukin
431	7.4	46.3	10	1	AAA33346	Low adenosine anti	C 504	7.4	46.3	10	1	ABK96613	Human interleukin
432	7.4	46.3	10	1	AAA33035	Low adenosine anti	C 505	7.4	46.3	10	1	ABK30047	Human SCYB14 prefe
C 433	7.4	46.3	10	1	AAZ77812	Human dendritic ce	C 506	7.4	46.3	10	1	ABL36369	Human lysosomal ac
C 434	7.4	46.3	10	1	AAZ78048	Human dendritic ce	507	7.4	46.3	10	1	AA148132	Human neurotrophide
C 435	7.4	46.3	10	1	AAZ77777	Human dendritic ce	508	7.4	46.3	10	1	AA148135	Human neurotrophide
C 436	7.4	46.3	10	1	AA88594	Forward primer OPE	C 509	7.4	46.3	10	1	AA595986	Human CALM1 gene a
C 437	7.4	46.3	10	1	AA280951	Metastatic breast	C 510	7.4	46.3	10	1	AC41663	Zinc finger protei
C 438	7.4	46.3	10	1	AA282378	Metastatic breast	C 511	7.4	46.3	10	1	ABT14295	Nucleic acid PCR a
439	7.4	46.3	10	1	AA283954	Metastatic breast	C 512	7.4	46.3	10	1	ADA63313	Zinc finger target
C 440	7.4	46.3	10	1	AA285562	Metastatic breast	C 513	7.4	46.3	10	1	ADE11568	Heparin-binding pr
C 441	7.4	46.3	10	1	AA286321	Metastatic breast	C 514	7.4	46.3	10	1	ADH75124	Photodamage detect
C 442	7.4	46.3	10	1	AA283218	Metastatic breast	C 515	7.4	46.3	10	1	ADH75019	Photodamage detect
443	7.4	46.3	10	1	AA282321	Metastatic breast	C 516	7.4	46.3	10	1	ADH75069	Photodamage detect
C 444	7.4	46.3	10	1	AA285534	Metastatic breast	C 517	7.4	46.3	10	1	AD110077	IL-1 activated HOV
445	7.4	46.3	10	1	AA280826	Metastatic breast	518	7.4	46.3	10	1	ABZ94851	Human adenosine A1
446	7.4	46.3	10	1	AA281263	Metastatic breast	519	7.4	46.3	10	1	ABZ94962	Human adenosine A1
C 447	7.4	46.3	10	1	AA273991	Human dendritic ce	520	7.4	46.3	10	1	ADM21517	Synthetic zinc fin
C 448	7.4	46.3	10	1	AA569254	Human macrophage g	521	7.4	46.3	10	1	AD196231	CD15+ myeloid cell
C 449	7.4	46.3	10	1	AAA56131	Human monocyte gen	C 522	7.4	46.3	10	1	ADM77084	Photodamage marker
C 450	7.4	46.3	10	1	AAA56346	Human macrophage g	C 523	7.4	46.3	10	1	ADM77139	Photodamage marker
451	7.4	46.3	10	1	AAA03305	Human adenosine A1	C 524	7.4	46.3	10	1	ADM77030	Photodamage marker
452	7.4	46.3	10	1	AAA03394	Human adenosine A1	525	7.4	46.3	10	1	ABD18810	Human adenosine A1
C 453	7.4	46.3	10	1	AA279737	Human colon tumour	526	7.4	46.3	10	1	ABD18699	Human adenosine A1
C 454	7.4	46.3	10	1	AA289806	Differential displ	C 527	7.4	46.3	10	1	ABD19487	Human photodamage
455	7.4	46.3	10	1	AA19268	Human adenosine A1	C 528	7.4	46.3	10	1	ADZ99487	Human photodamage
C 456	7.4	46.3	10	1	AA191517	Human adenosine A1	C 529	7.4	46.3	10	1	ADH57741	PCR primer for li-
C 457	7.4	46.3	10	1	AA288018	Human adenosine A1	C 530	7.4	46.3	10	1	ADH57677	Extendable oligo E
458	7.4	46.3	10	1	AA280430	Primer #6 for dete	C 531	7.4	46.3	10	1	ADJ65134	N. crassa frq gene
459	7.4	46.3	10	1	AA200864	Human CHRN3 gene	532	7.4	46.3	10	1	ADM76272	NEPHA gene transcr
C 460	7.4	46.3	10	1	AA299933	Immunostimulatory	533	7.4	46.3	10	1	ADN89076	Hyperlipidemia tre
C 461	7.4	46.3	10	1	AAH63367	Human ubiquitously	534	7.4	46.3	10	1	ADN89076	Breast cancer dese
C 462	7.4	46.3	10	1	AAH63399	Human cancer tissu	C 535	7.4	46.3	10	1	ADN89076	Breast cancer dese
C 463	7.4	46.3	10	1	AAH63289	Human colon epithe	C 536	7.4	46.3	10	1	ADN89076	Breast cancer dese
C 464	7.4	46.3	10	1	AAH63187	Human colon epithe	537	7.4	46.3	10	1	ADN89076	Breast cancer dese
C 465	7.4	46.3	10	1	AAH64478	Human ubiquitously	C 538	7.4	46.3	10	1	ADN89076	Breast cancer dese
C 466	7.4	46.3	10	1	AAH64624	Human colon cancer	539	7.4	46.3	10	1	ADU18834	Hypoxia-related tu
467	7.4	46.3	10	1	AAH63217	Human colon epithe	540	7.4	46.3	10	1	ADU18663	Hypoxia-related tu
468	7.4	46.3	10	1	AAH64506	Human ubiquitously	541	7.4	46.3	10	1	ADU18279	Hypoxia-related tu
C 469	7.4	46.3	10	1	AAH64690	Human highly expre	542	7.4	46.3	10	1	ADU40795	Novel nucleotide a
C 470	7.4	46.3	10	1	AAH32940	LPS activated huma	543	7.4	46.3	10	1	ADW28687	DNA amplification
C 471	7.4	46.3	10	1	ABA06088	Human normal hepat	544	7.4	46.3	10	1	ADV92177	Universal bacteria

691 7 43.8 10 1 ADZ67948 NTRK1 gene polymor
692 7 43.8 10 1 AEA62015 NTRK1 gene polymor
693 7 43.8 10 1 AEA52329 Prostate cancer ge

ALIGNMENTS

RESULT 1
AAD30246
ID AAD30246 standard; DNA; 16 BP.
XX AC AAD30246;
XX DT 17-MAY-2002 (first entry)
XX DE Human PKD1 gene mutation detecting nested PCR primer, 1R1.
XX KW Human; PKD1 gene; autosomal dominant polycystic kidney disease; ADPKD;
XX KW acquired cystic disease; transgenic animal; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200206529-A2.
XX PD 24-JAN-2002.
XX PF 13-JUL-2001; 2001WO-US022035.
XX PR 13-JUL-2000; 2000US-0218261P.
XX PR 13-APR-2001; 2001US-0283691P.
XX PA (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
XX PI Germino GG, Watnick TJ, Phakdeekitcharoen B;
XX DR WPI; 2002-179805/23.
XX PT Novel primer for diagnosing polycystic kidney disease-associated
XX PT disorder, comprises regions having sequence that selectively hybridizes
XX PT to polycystic kidney disease gene sequence.
XX PS Claim 6; Page 100; 192pp; English.
XX CC The present invention relates to compositions and methods useful for the
XX CC identification and detection of polycystic kidney disease (PKD1) gene
XX CC mutations. The invention also relates to primers comprising a 5' region
XX CC having a sequence that selectively hybridizes to a PKD1 gene sequence and
XX CC optionally, to a PKD1 homologue sequence and an adjacent 3' region having
XX CC a sequence that selectively hybridizes to a PKD1 gene sequence and not to
XX CC a PKD1 homologue sequence. Primer pairs of the invention are useful for
XX CC detecting the presence or absence of a mutation in a PKD1 polynucleotide
XX CC in a sample, for identifying a subject at risk for a PKD1-associated
XX CC disorder such as autosomal dominant polycystic kidney disease (ADPKD) or
XX CC acquired cystic disease and for diagnosing a PKD1-associated disorder in
XX CC a subject. They are useful for selectively amplifying a region of a PKD1
XX CC gene. PKD1 DNA fragments are useful for detecting the presence of a mutant
XX CC PKD1 polynucleotide in a sample, as a probe for an amplification
XX CC reaction, in hybridisation or amplification assays of biological samples
XX CC to detect abnormalities of PKD1 expression and for engineering transgenic
XX CC animals. The present sequence is a PCR primer used to detect mutation in
XX CC human PKD1 gene
SQ Sequence 16 BP; 1 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 100.0%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 5.6; Mismatches 0; Indels 0; Gaps 0;
Matches 16; Conservative 0;

Qy 1 CGCGCGGCGGCATCGT 16
|||
Db 1 CGCGCGGCGGCATCGT 16

RESULT 2
AAZ23783/c
ID AAZ23783 standard; RNA; 14 BP.
XX AC AAZ23783;
XX DT 14-JAN-2000 (first entry)
XX DE HSV RNA fragment 1.
XX KW Antisense; DNA library; identification; multiple cloning site; MCS;
XX KW inhibition; ss.
XX OS Herpes simplex virus unknown type.
XX PN WO9950457-A1.
XX PD 07-OCT-1999.
XX PF 28-MAR-1999; 99WO-US006742.
XX PR 28-MAR-1998; 98US-0079792P.
XX PR 06-NOV-1998; 98US-0107504P.
XX PA (UTAH) UNIV UTAH RES FOUND.
XX PI Ruffner DE, Pierce ML, Chen Z;
XX DR WPI; 1999-610866/52.
XX PT Production of antisense libraries, used for identifying antisense agents
XX PT and for identifying target sites for antisense-mediated inhibition of a
XX PT selected gene.
XX PS Example 4; Page 56; 63pp; English.
XX CC This invention describes a novel method for generating an antisense
XX CC library targeted to a selected RNA transcript. The methods can be used
XX CC for identifying antisense agents and for identifying target sites for
XX CC antisense-mediated inhibition of a selected gene. The use of a direct
XX CC library for target site selection significantly simplifies the screening
XX CC process, since only very small libraries need be prepared and assayed.
XX CC AAZ23783-223798 represent RNA fragments derived from the Herpes simplex
XX CC virus genome which are used to illustrate the method of the invention
SQ Sequence 14 BP; 1 A; 9 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 77.5%; Score 12.4; DB 1; Length 14;
Best Local Similarity 92.9%; Pred. No. 33; Mismatches 1; Indels 0; Gaps 0;
Matches 13; Conservative 0;
Qy 2 GGCGGCGGCATCG 15
|||
Db 14 GGCGGCGGCATCG 1
RESULT 3
AAQ81710
ID AAQ81710 standard; DNA; 15 BP.
XX AC AAQ81710;
XX DT 25-MAR-2003 (revised)
XX DT 06-SEP-1995 (first entry)
XX DE Antisense oligonucleotide #5 to TGF-beta mRNA.
XX KW Antisense; fibrogenic; cytokine; transforming growth factor-beta;
XX KW TGF-beta; phosphorothioate; scar; wound; tumour necrosis factor-alpha;
XX KW TNF-alpha; platelet derived growth factor; PDGF; fibroblast; epithelial;
XX KW growth factor; FGF; EGF; interleukin; IL-1; IL-6; collagen; ss.
XX

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OS Synthetic.
XX Key Location/Qualifiers
FH misc_difference 1. .15
FT /*tag= a
FT /*note= "nucleotide linkages may be phosphorothioate"
FT
XX
XX WO9500103-A2.
XX
XX
XX 05-JAN-1995.
XX
XX 11-JUN-1994; 94WO-KR000066.
XX
XX 15-JUN-1993; 93KR-00010883.
XX
XX 06-OCT-1993; 93US-00132259.
XX
XX (ILYA-) IL YANG PHARM CO LTD.
XX
XX Chung HT;
XX
XX WPI; 1995-051691/07.
XX
XX New anti-sense oligo-nucleotide(s) to mRNA of fibrogenic cytokine - esp.
XX transforming growth factor-beta and platelet derived growth factor, used
XX topically to inhibit scar formation at wound sites.
XX
XX Claim 5; Page 23; 28pp; English.
XX
XX Oligonucleotides (AAO81706-15) are antisense oligonucleotides
XX complementary to the mRNA of the fibrogenic cytokine transforming growth
XX factor-beta (TGF-beta) which inhibit expression of this cytokine. The
XX oligonucleotides may contain phosphorothioate linkages to render them
XX nuclease resistant. They are used to inhibit scar formation at a wound
XX site by preventing the production of fibrogenic cytokines such as TGF-
XX beta. Tumour necrosis factor-alpha (TNF-alpha), platelet derived growth
XX factor (PDGF), fibroblast or epithelial growth factors (FGF or EGF) or
XX interleukins 1 or 6 (IL-1, IL-6) which are released at high level at the
XX wound periphery. The oligonucleotides reduce collagen content of the
XX wound and increase tensile strength. Treated wounds are indistinguishable
XX from normal tissue. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 15 BP; 2 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 71.2%; Score 11.4; DB 1; Length 15;
XX Best Local Similarity 92.3%; Pred. No. 62;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1 CGCGCGCGGCAT 13
XX ||| |||||
XX Db 3 CGGAGGCGGCAT 15
XX
XX RESULT 4
XX ADU94434/C
XX ID ADU94434 standard; RNA; 16 BP.
XX
XX AC ADU94434;
XX
XX 10-FEB-2005 (first entry)
XX
XX Human TERT ribozyme substrate sequence #8.
XX
XX Enzymatic nucleic acid molecule; gene expression; down regulation;
XX protein-tyrosine-phosphatase-1b; PTB-1b; methionine aminopeptidase;
XX MetAP-2; human telomerase; hTERT; protein kinase C alpha; PKC alpha;
XX beta-secretase; BACE; human epidermal growth factor receptor-2; HER2;
XX c-erb2; neu; phospholamban; PLN; presenilin-1; ps-1; presenilin-2; ps-2;
XX hepatitis B virus; HBV; hammerhead; HH; hairpin; NCH; inozyme; G-cleaver;
XX amberzyme; zinzyme; DNAzyme; cancer; breast cancer; Alzheimer's disease;
XX diabetes; obesity; cardiac disease; heart disease; age-related disease;
XX hepatitis B infection; hepatocellular carcinoma; Genetic drift; human;
XX ss.

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OS Homo sapiens.
XX
XX WO200116312-A2.
XX
XX 08-MAR-2001.
XX
XX 30-AUG-2000; 2000WO-US023998.
XX
XX 31-AUG-1999; 99US-0151713P.
XX
XX 27-SEP-1999; 99US-00406643.
XX
XX 27-SEP-1999; 99US-0156236P.
XX
XX 27-SEP-1999; 99US-0156467P.
XX
XX 08-NOV-1999; 99US-00436430.
XX
XX 06-DEC-1999; 99US-0169100P.
XX
XX 29-DEC-1999; 99US-00474432.
XX
XX 29-DEC-1999; 99US-0173612P.
XX
XX 30-DEC-1999; 99US-00476387.
XX
XX 04-FEB-2000; 2000US-00498824.
XX
XX 20-MAR-2000; 2000US-00531025.
XX
XX 14-APR-2000; 2000US-0197769P.
XX
XX 23-MAY-2000; 2000US-00578223.
XX
XX 09-AUG-2000; 2000US-00636385.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Usman N, Beigelman L, Burgin A;
XX Karpeisky A, Matulic-Adamic J, Sweedler D, Draper K, Chowrira B;
XX Stinchcomb D, Beaudry A, Zinnen S, Ludwig J, Sproat BS;
XX
XX WPI; 2001-244406/25.
XX
XX Enzymatic nucleic acid molecules able to cleave separate RNA molecules
XX are used for treating cancer, Alzheimer's disease, hepatitis, diabetes,
XX obesity and heart disease.
XX
XX Example 1; Page 299; 717pp; English.
XX
XX The present invention relates to the use of enzymatic nucleic acid
XX molecules (e.g. ribozymes) to modulate gene expression. The invention
XX also methods for their use to down regulate or inhibit the expression of
XX genes encoding protein-tyrosine-phosphatase-1b (PTB-1b), methionine
XX aminopeptidase (MetAP-2), human telomerase (hTERT), protein kinase C
XX alpha (PKC alpha), beta-secretase (BACE), human epidermal growth factor
XX receptor-2 (HER2/c-erb2/neu), phospholamban (PLN), presenilin-1 (ps-1),
XX presenilin-2 (ps-2), and hepatitis B virus (HBV) proteins. The enzymatic
XX nucleic acid molecules used to inhibit the expression of the said genes
XX include hammerhead (HH), hairpin, NCH (inozyme), G-cleaver, amberzyme,
XX zinzyme, and/or DNAzyme motifs. The methods of the invention are useful
XX for treating cancer, in particular breast cancer, Alzheimer's disease,
XX diabetes, obesity, cardiac diseases e.g. heart disease, age-related
XX diseases, hepatitis B infections, and hepatitis and hepatocellular
XX carcinoma. The enzymatic nucleic acid molecules can also be used as
XX diagnostic tools to examine genetic drift and mutations within diseased
XX cells and to detect the presence of specific RNA in a cell. The present
XX sequence represents a substrate/target sequence for a ribozyme used in
XX the examples of the present invention. Note: Some SEQ ID Nos are repeated
XX more than once in the specification, but these have different sequences
XX associated with them.
XX
XX Sequence 16 BP; 1 A; 7 C; 6 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 71.2%; Score 11.4; DB 1; Length 16;
XX Best Local Similarity 92.3%; Pred. No. 68;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3 GCGGCGCGGCATCG 15
XX ||| |||||
XX Db 14 GCGGCGCGGCATCG 2
XX
XX RESULT 5
XX ADU94433/C
XX ID ADU94433 standard; RNA; 16 BP.

```

XX ADU94433;
XX
XX 10-FEB-2005 (first entry)
XX
XX Human TERT G-cleaver ribozyme substrate sequence #7.
XX
XX Enzymatic nucleic acid molecule; gene expression; down regulation;
KW Protein-tyrosine-phosphatase-1b; PTB-1b; methionine aminopeptidase;
KW MetAP-2; human telomerase; hTERT; protein kinase C alpha; PKC alpha;
KW beta-secretase; BACE; human epidermal growth factor receptor-2; HER2;
KW c-erb2; neu; phospholamban; PLN; presenilin-1; ps-1; presenilin-2; ps-2;
KW hepatitis B virus; HBV; hammerhead; HH; hairpin; NCH; inozyme; G-cleaver;
KW amberzyme; zinzyme; DNzyme; cancer; breast cancer; Alzheimer's disease;
KW diabetes; obesity; cardiac disease; heart disease; age-related disease;
KW hepatitis B infection; hepatocellular carcinoma; genetic drift; human;
KW ss.
XX Homo sapiens.
XX
XX WO200116312-A2.
XX
XX 08-MAR-2001.
XX
XX 30-AUG-2000; 2000WO-US023998.
XX
XX 31-AUG-1999; 99US-0151713P.
XX 27-SEP-1999; 99US-00406643.
XX 27-SEP-1999; 99US-0156236P.
XX 27-SEP-1999; 99US-0156467P.
XX 08-NOV-1999; 99US-00436430.
XX 06-DEC-1999; 99US-0169100P.
XX 29-DEC-1999; 99US-00474432.
XX 29-DEC-1999; 99US-0173612P.
XX 30-DEC-1999; 99US-00476387.
XX 04-FEB-2000; 2000US-00498824.
XX 20-MAR-2000; 2000US-00531025.
XX 14-APR-2000; 2000US-0197769P.
XX 23-MAY-2000; 2000US-00578223.
XX 09-AUG-2000; 2000US-00636385.
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PI Stinchcomb D, Beaudry A, Zinnen S, Ludwig J, Sproat BS;
XX
XX WPI; 2001-244406/25.
XX
XX Enzymatic nucleic acid molecules able to cleave separate RNA molecules
PT are used for treating cancer, Alzheimer's disease, hepatitis, diabetes,
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XX
XX Example 1; Page 299; 717pp; English.
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XX The present invention relates to the use of enzymatic nucleic acid
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CC also methods for their use to down regulate or inhibit the expression of
CC genes encoding protein-tyrosine-phosphatase-1b (PTB-1b), methionine
CC aminopeptidase (MetAP-2), human telomerase (hTERT), protein kinase C
CC alpha (PKC alpha), beta-secretase (BACE), human epidermal growth factor
CC receptor-2 (HER2/c-erb2/neu), phospholamban (PLN), presenilin-1 (ps-1);
CC presenilin-2 (ps-2), and hepatitis B virus (HBV) proteins. The enzymatic
CC nucleic acid molecules used to inhibit the expression of the said genes
CC include hammerhead (HH), hairpin, NCH (inozyme), G-cleaver, amberzyme,
CC zinzyme, and/or DNzyme motifs. The methods of the invention are useful
CC for treating cancer, in particular breast cancer, Alzheimer's disease,
CC diabetes, obesity, cardiac diseases e.g. heart disease, age-related
CC diseases, hepatitis B infections, and hepatitis and hepatocellular
CC carcinoma. The enzymatic nucleic acid molecules can also be used as
CC diagnostic tools to examine genetic drift and mutations within diseased
CC cells and to detect the presence of specific RNA in a cell. The present
CC sequence represents a substrate/target sequence for a ribozyme used in

CC the examples of the present invention. Note: Some SEQ ID Nos are repeated
CC more than once in the specification, but these have different sequences
CC associated with them.
XX
XX Sequence 16 BP; 1 A; 8 C; 6 G; 0 T; 1 U; 0 Other;
SQ
Query Match 71.2%; Score 11.4; DB 1; Length 16;
Best Local Similarity 92.3%; Pred. No. 68;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGCGGCGCATCG 15
||| |||||
DB 16 GCGGCGGCGCATCG 4
||| |||||
RESULT 6
AAF45463/c
ID AAF45463 standard; DNA; 15 BP.
XX
XX AAF45463;
AC
XX 30-MAR-2001 (first entry)
DT
XX IGFBP2 oligonucleotide #302.
DE
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hypervascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX Homo sapiens.
OS
XX WO200078341-A1.
PN
XX 28-DEC-2000.
PD
XX 21-JUN-2000; 2000WO-AU000693.
PF
XX 21-JUN-1999; 99US-0140345P.
PR
XX (MURD-) MURDOCH CHILDRENS RES INST.
PA
XX Wraight CJ, Werther GA, Edmondson SR;
PI
XX WPI; 2001-041421/05.
DR
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
PT
XX Example 6; Page 36; 201pp; English.
PS
XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hypervascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX

SQ Sequence 15 BP; 0 A; 9 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 68.8%; Score 11; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 76;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGCGCGGCGGC 11
 DB 12 CGCGCGGCGGC 2
 |||||

RESULT 7
 AAF45462/c
 ID AAF45462 standard; DNA; 15 BP.

XX AC AAF45462;
 XX AC
 XX 30-MAR-2001 (first entry)
 XX AC
 XX IGFBP2 oligonucleotide #301.
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.

XX Example 6; Page 36; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

SQ Sequence 15 BP; 0 A; 9 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 68.8%; Score 11; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 76;

Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGCGGCGGC 11
 DB 13 CGCGCGGCGGC 3
 |||||

RESULT 8

AAF45460/c

ID AAF45460 standard; DNA; 15 BP.

XX AC AAF45460;

XX AC

XX 30-MAR-2001 (first entry)

XX AC

XX IGFBP2 oligonucleotide #299.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.

XX Example 6; Page 36; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

SQ Sequence 15 BP; 0 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 68.8%; Score 11; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 76;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGCGCGGCGGC 11
 |||||

```

Db      15 CGCGGGCGGC 5

RESULT 9
AAF45461/c
ID AAF45461 standard; DNA; 15 BP.
XX
AC AAF45461;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP2 oligonucleotide #300.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-1999; 99US-0140345P.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 6; Page 36; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 0 A; 9 C; 5 G; 1 T; 0 U; 0 Other;

Query Match      68.8%; Score 11; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 76;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGCGGGCGGC 11
        |||||
Db      14 CGCGGGCGGC 4

RESULT 10
AAV47232
ID AAV47232 standard; DNA; 14 BP.
XX
AC AAV47232;
XX
SQ Sequence 15 BP; 0 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

Query Match      68.8%; Score 11; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 76;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGCGGGCGGC 11
        |||||
Db      11 CGCGGGCGGC 1

RESULT 11
AAV47232
ID AAV47232 standard; DNA; 14 BP.
XX
AC AAV47232;

```

```

XX DT 10-NOV-1998 (first entry)
XX DE
XX KW Antisense oligonucleotide 732, targeting adenosine A1 receptor.
XX KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX KW
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1..14
XX FT /*tag= a
XX FT /note= "contains phosphorothioate internucleotide
XX FT linkages"
XX PN WO9823294-A1.
XX PD 04-JUN-1998.
XX XX
XX PF 26-NOV-1997; 97WO-US022017.
XX XX
XX PR 26-NOV-1996; 96US-00757024.
XX XX
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX XX
XX DR WPI; 1998-322464/28.
XX XX
XX PT Treating respiratory disease with antisense sequences directed against
XX PT adenosine or bradykinin receptors - with localised delivery to the
XX PT respiratory system, suitable for long term treatment of asthma, adult
XX PT respiratory distress syndrome etc.
XX XX
XX PS Claim 12; Page 8-24; 47pp; English.
XX XX
XX CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
XX CC human adenosine A1 receptor, the design of which required the secondary
XX CC structure of this targets mRNA. The adenosine receptor mRNA secondary
XX CC structure was both analysed and used to construct antisense
XX CC oligonucleotides containing a phosphorothioate backbone. Once the
XX CC antisense molecules are created they can be used to target their
XX CC predetermined target, thus causing the gene product to decrease. The
XX CC antisense oligonucleotides were targeted to specific mRNA regions
XX CC containing either a junction between the intron and exon, or where they
XX CC may overlap the initiation codon. The receptor is a member of the G-
XX CC protein coupled family of cell surface receptors that have 7-
XX CC transmembrane segments. These oligonucleotides can be used to treat or
XX CC prevent conditions associated with bronchoconstriction and/or lung
XX CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
XX CC allergy, emphysema and cystic fibrosis
XX XX
XX SQ Sequence 14 BP; 2 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 67.5%; Score 10.8; DB 1; Length 14;
XX Best Local Similarity 85.7%; Pred. No. 77;
XX Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2 GGCGGGCGGCATCG 15
XX || || || || || || || ||
XX Db 1 GGAGGGCGGCATGG 14
XX
XX RESULT 12
XX AAX53609
XX ID AAX53609 standard; DNA; 14 BP.
XX AC AAX53609;
XX XX
XX DT 05-JUL-1999 (first entry)

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XX XX Human adenosine A1 receptor antisense oligonucleotide fragment.
XX DE
XX KW Antisense oligonucleotide; multiple target; antisense treatment;
XX KW impaired respiration; inflammation; lung disease;
XX KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
XX KW acute asthma; allergy; asthma; impeded respiration;
XX KW respiratory distress syndrome; pain; cystic fibrosis;
XX KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
XX KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
XX KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
XX KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX KW prostate cancer; ss.
XX OS Synthetic.
XX OS WO9913886-A1.
XX PN
XX PD 25-MAR-1999.
XX XX
XX PF 17-SRP-1998; 98WO-US019419.
XX XX
XX PR 17-SEP-1997; 97US-0059160P.
XX PR 09-JUN-1998; 98US-00093972.
XX XX
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX XX
XX DR WPI; 1999-229400/19.
XX XX
XX PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX PT vasoconstriction.
XX XX
XX PS Disclosure; Page 38; 120pp; English.
XX XX
XX CC The specification describes antisense oligonucleotides (AAX52869-X55271)
XX CC directed against at least 2 mRNAs selected from target genes, coding and
XX CC non-coding regions of RNAs corresponding to target genes, gene initiation
XX CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX CC end and the juxta-section between coding and non-coding regions and all
XX CC segments of RNAs encoding proteins associated with one or more diseases,
XX CC conditions or mixtures. The antisense oligonucleotides may be derived
XX CC from sequences AAX5272-74. These multiple target oligonucleotides
XX CC (specifically AAX55180-271) can be used for the antisense treatment of
XX CC diseases and conditions. Typical diseases and conditions are those
XX CC associated with impaired respiration and inflammation, including lung
XX CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX CC acute asthma, allergies, asthma, impeded respiration, respiratory
XX CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
XX CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
XX CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
XX CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
XX CC well as all types of cancers which may metastasize or have metastasized
XX CC to the lungs, including breast and prostate cancer
XX XX
XX SQ Sequence 14 BP; 2 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 67.5%; Score 10.8; DB 1; Length 14;
XX Best Local Similarity 85.7%; Pred. No. 77;
XX Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2 GGCGGGCGGCATCG 15
XX || || || || || || || ||
XX Db 1 GGAGGGCGGCATGG 14
XX
XX RESULT 13
XX AAX33052
XX ID AAX33052 standard; DNA; 14 BP.
XX AC AAX33052;
XX XX
XX AC AAX33052;

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XX DT 28-JUL-2000 (first entry)
XX DE Low adenosine antisense oligonucleotide SEQ ID NO:741.
XX KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
XX KW phosphorothioate; impaired respiration; inflammation; allergy;
XX KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
XX KW antiallergic; antitachmatic; cyostatic; analgesic; impaired airway;
XX KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
XX KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
XX KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
XX KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX OS Homo sapiens.
XX PN WO200009525-A2.
XX PD 24-FEB-2000.
XX PF 03-AUG-1999; 99WO-US017712.
XX PR 03-AUG-1998; 98US-0095212P.
XX PS (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX DR WPI; 2000-205971/18.
XX PT New antisense oligonucleotides useful for treating e.g. pulmonary
XX PT vasoconstriction, inflammation, allergies, asthma, hypertension,
XX PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
XX PT cancers.
XX PS Claim 18; Page 359; 1343pp; English.
XX CC The present invention describes a new composition comprising an antisense
XX CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
XX CC nucleic acids involved in bronchoconstriction, allergies, and/or
XX CC inflammation. The ON can have antiinflammatory, antiallergic,
XX CC antitachmatic, cyostatic and analgesic activities. The compositions are
XX CC useful for the treatment of diseases associated with inflammation,
XX CC impaired airways, including lung disease and diseases whose secondary
XX CC effects afflict the lungs of a subject. They can be used for treating
XX CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
XX CC impeded respiration, respiratory distress syndrome, pain, cystic
XX CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
XX CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
XX CC carcinomas, and cancers which may metastasise to the lungs, including
XX CC breast and prostate cancer. The reduction of the adenosine content of the
XX CC ONs reduces side effects. The A-containing ONs break down with the
XX CC release of deoxyadenosine which activates adenosine receptors causing
XX CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
XX CC nucleotide sequences given in the sequence listing from the present
XX CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
XX CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
XX CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
XX CC AAA33992) are specifically claimed ONs from the present invention. N.B.
XX CC Sequences given in the disclosure of the present invention do not match
XX CC up with their corresponding SEQ ID NO: sequences given in the sequence
XX CC listing
XX SQ Sequence 14 BP; 2 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
Query Match 67.5%; Score 10.8; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 77;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCATCG 15
DB 1 GGAGGGCGGCATGG 14

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RESULT 14
AAA03411
XX ID AAA03411 standard; DNA; 14 BP.
XX AC AAA03411;
XX DT 19-MAY-2000 (first entry)
XX DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:695.
XX KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
XX KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
XX KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
XX KW endotoxin release; AKDS; acute respiratory distress syndrome;
XX KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
XX KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
XX KW chronic obstructive pulmonary disease; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO9963938-A2.
XX PD 16-DEC-1999.
XX PF 08-JUN-1999; 99WO-US012775.
XX PR 08-JUN-1998; 98US-0088501P.
XX PR 09-JUN-1998; 98US-00093972.
XX PR 09-JUN-1998; 98US-0088657P.
XX PS (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Hill JL;
XX DR WPI; 2000-116433/10.
XX PT Novel composition for treating or preventing e.g. cardiopulmonary and
XX PT renal injury.
XX PS Claim 17; Page 34; 252pp; English.
XX CC The present invention describes a pharmaceutical composition, comprising
XX CC at least one agent (I) that prevents, alleviates and/or inhibits
XX CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
XX CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
XX CC (Ib), containing less than 15% adenosine (A), that is antisense to target
XX CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
XX CC ends or segments between coding and non-coding sequences), or to all
XX CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
XX CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
XX CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
XX CC and (Ib), and optionally also contains one or more surfactants. The
XX CC compositions are used to prevent, alleviate and/or treat adenosine
XX CC receptor-mediated cardiac, lung and/or renal damage or failure
XX CC (particularly where associated with ischaemia, toxin release and/or
XX CC administration of drugs or imaging agents, e.g. adenosine for treating
XX CC supraventricular tachycardia); (adult) respiratory distress syndrome
XX CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
XX CC pulmonary disease; cardiopulmonary hypoxia associated with administration
XX CC of stress-test agents, particularly where such conditions are associated
XX CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
XX CC AAA03715 represent specifically claimed phosphorothioate antisense
XX CC oligonucleotides for use in the composition of the present invention.
XX CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
XX CC phosphorothioate oligonucleotides used in the exemplification of the
XX CC present invention
XX SQ Sequence 14 BP; 2 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
Query Match 67.5%; Score 10.8; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 77;

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CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 14 BP; 2 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 67.5%; Score 10.8; DB 1; Length 14;
 Best Local Similarity 85.7%; Pred. No. 77;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GCGCGCGGCATCG 15
 Db 1 GGAGGGCGGCATGG 14
 RESULT 17
 ABD18716
 ID ABD18716 standard; DNA; 14 BP.
 XX
 AC ABD18716;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human adenosine A1 receptor oligonucleotide fragment 731.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 10110; 763pp; English.
 PS
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer.
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 14 BP; 2 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
 Query Match 67.5%; Score 10.8; DB 1; Length 14;
 Best Local Similarity 85.7%; Pred. No. 77;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GCGCGCGGCATCG 15
 Db 1 GGAGGGCGGCATGG 14
 RESULT 18
 AAQ75042
 ID AAQ75042 standard; DNA; 15 BP.
 XX
 AC AAQ75042;
 XX
 DT 25-MAR-2003 (revised)
 DT 18-AUG-1995 (first entry)
 XX
 DE Human TGF-beta(1) antisense oligomer.
 XX
 KW Human transforming growth factor beta 1; hTGFb1; antisense therapy;
 KW restenosis prevention; cardiovascular angioplasty; ss.
 XX
 OS Synthetic.
 XX
 PN WO9426888-A1.
 XX
 PD 24-NOV-1994.
 XX
 PF 18-MAY-1994; 94WO-US005566.
 XX
 PR 19-MAY-1993; 93US-00063980.
 PR 20-AUG-1993; 93US-00110294.
 XX
 PA (STRD) UNIV LELAND STANFORD JUNIOR.
 XX
 PI Dzau VJ;
 XX
 XX WPI; 1995-006785/01.
 DR
 XX Inhibiting cellular activity associated with vascular lesions - with
 PT anti-sense oligomers against cyclin or cyclin dependent kinase genes,
 PT partic. for preventing restenosis after cardiovascular angioplasty.
 XX
 PS Disclosure; Page 8; 77pp; English.
 XX
 XX AAQ75042 is a human TGF-beta(1) (hTGFb1) antisense oligomer, which
 CC inhibits the expression of TGFb1. When administered to a site of lesion
 CC formation the antisense oligomer helps prevent restenosis, after
 CC cardiovascular angioplasty. (Updated on 25-MAR-2003 to correct PN field.)
 XX

```
SQ Sequence 15 BP; 2 A; 2 C; 10 G; 1 T; 0 U; 0 Other;
Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
Db 1 GGAGGGCGGCATGG 14

RESULT 19
AAQ75043/c
ID AAQ75043 standard; DNA; 15 BP.
XX
AC AAQ75043;
XX
XX 25-MAR-2003 (revised)
DT 15-AUG-1995 (first entry)
XX
XX Human TGF-beta(1) PCR primer.
DE
XX Human transforming growth factor beta 1; hTGFb1; antisense therapy;
KW restenosis prevention; cardiovascular angioplasty; PCR primer; ss.
XX
XX Synthetic.
OS
XX WO9426888-A1.
PN
XX 24-NOV-1994.
PD
XX 18-MAY-1994; 94WO-US005566.
PF
XX 19-MAY-1993; 93US-00063980.
PR 20-AUG-1993; 93US-00110294.
XX
XX (STRD ) UNIV LELAND STANFORD JUNIOR.
PA
XX Dzaou VJ;
PI
XX WPI; 1995-006785/01.
DR
XX Inhibiting cellular activity associated with vascular lesions - with
PT anti-sense oligomers against cyclin or cyclin dependent kinase genes,
PT partic. for preventing restenosis after cardiovascular angioplasty.
XX
XX Disclosure; Page 8; 77pp; English.
XX
XX AAQ75043 and AAQ75044 are a pair of primers for the PCR amplification of
CC human TGF-beta(1) (hTGFb1). These were used in the development of an
CC anti-sense oligomer which inhibits the expression of TGFb1. When
CC administered to a site of lesion formation the oligomer helps prevent
CC restenosis, after cardiovascular angioplasty. (Updated on 25-MAR-2003 to
CC correct PN field.)
XX
SQ Sequence 15 BP; 1 A; 10 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
Db 15 GGAGGGCGGCATGG 2

RESULT 20
AAV47210
ID AAV47210 standard; DNA; 15 BP.
XX
XX AAV47210;
AC
XX 10-NOV-1998 (first entry)
DT

XX Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
Db 2 GGAGGGCGGCATGG 15

RESULT 21
AAV47231
ID AAV47231 standard; DNA; 15 BP.
XX
XX AAV47231;
AC
XX 10-NOV-1998 (first entry)
DT
XX Antisense oligonucleotide 731, targeting adenosine A1 receptor.
DE
```

```
XX
DE Antisense oligonucleotide 710, targeting adenosine A1 receptor.
XX
XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT modified_base 1..15
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide
FT linkages"
XX
XX WO9823294-A1.
PN
XX 04-JUN-1998.
PD
XX 26-NOV-1997; 97WO-US022017.
PF
XX 26-NOV-1996; 96US-00757024.
PR
XX (UYEC-) UNIV EAST CAROLINA.
PA
XX Myce JW;
PI
XX WPI; 1998-322464/28.
DR
XX Treating respiratory disease with antisense sequences directed against
PT adenosine or bradykinin receptors - with localised delivery to the
PT respiratory system, suitable for long term treatment of asthma, adult
PT respiratory distress syndrome etc.
XX
XX Claim 12; Page 8-24; 47pp; English.
XX
XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
CC human adenosine A1 receptor, the design of which required the secondary
CC structure of this targets mRNA. The adenosine receptor mRNA secondary
CC structure was both analysed and used to construct antisense
CC oligonucleotides containing a phosphorothioate backbone. Once the
CC antisense molecules are created they can be used to target their
CC predetermined target, thus causing the gene product to decrease. The
CC antisense oligonucleotides were targeted to specific mRNA regions
CC containing either a junction between the intron and exon, or where they
CC may overlap the initiation codon. The receptor is a member of the G-
CC protein coupled family of cell surface receptors that have 7-
CC transmembrane segments. These oligonucleotides can be used to treat or
CC prevent conditions associated with bronchoconstriction and/or lung
CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
CC allergy, emphysema and cystic fibrosis
XX
SQ Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
Db 2 GGAGGGCGGCATGG 15

RESULT 21
AAV47231
ID AAV47231 standard; DNA; 15 BP.
XX
XX AAV47231;
AC
XX 10-NOV-1998 (first entry)
DT
XX Antisense oligonucleotide 731, targeting adenosine A1 receptor.
DE
```

XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX Key Location/Qualifiers
 FH modified_base 1..15
 FT /*tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 PN WO9823294-A1.
 XX
 XX 04-JUN-1998.
 XX
 XX 26-NOV-1997; 97WO-US022017.
 XX
 XX 26-NOV-1996; 96US-00757024.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 XX
 XX Nyce JW;
 XX
 XX WPI; 1998-322464/28.
 XX
 XX Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX
 XX Claim 12; Page 8-24; 47pp; English.
 XX
 XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 XX Sequence 15 BP; 2 A; 3 C; 9 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 67.5%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 85;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GCGGGCGGCATCG 15
 || |||||
 Db 1 GGAGGGCGGCATGG 14
 || |||||
 RESULT 22
 AAX53587
 ID AAX53587 standard; DNA; 15 BP.
 XX
 AC AAX53587;
 XX
 DT 05-JUL-1999 (first entry)
 XX
 XX Human adenosine A1 receptor antisense oligonucleotide fragment.
 DE
 XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW

KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX Synthetic.
 OS
 XX WO9913886-A1.
 PN
 XX 25-MAR-1999.
 XX
 XX 17-SEP-1998; 98WO-US019419.
 XX
 XX 17-SEP-1997; 97US-0059160P.
 PR
 XX 09-JUN-1998; 98US-00093972.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 XX
 XX Nyce JW;
 XX
 XX WPI; 1999-229400/19.
 XX
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX
 XX Disclosure; Page 38; 120pp; English.
 PS
 XX The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 XX Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 67.5%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 85;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GCGGGCGGCATCG 15
 || |||||
 Db 2 GGAGGGCGGCATGG 15
 || |||||
 RESULT 23
 AAX53608
 ID AAX53608 standard; DNA; 15 BP.
 XX
 AC AAX53608;
 XX
 XX 05-JUL-1999 (first entry)
 DT
 XX Human adenosine A1 receptor antisense oligonucleotide fragment.
 DE


```

XX KW Antisense oligonucleotide; multiple target; antisense treatment;
XX KW impaired respiration; inflammation; lung disease;
XX KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
XX KW acute asthma; allergy; asthma; impeded respiration;
XX KW respiratory distress syndrome; pain; cystic fibrosis;
XX KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
XX KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
XX KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
XX KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX KW prostate cancer; ss.
XX OS Synthetic.
XX XX
XX PN WO9913886-A1.
XX PD
XX PD 25-MAR-1999.
XX XX
XX PF 17-SEP-1998; 98WO-US019419.
XX XX
XX PR 17-SEP-1997; 97US-0059160P.
XX PR 09-JUN-1998; 98US-00093972.
XX XX
XX PA (UYEC-) UNIV EAST CAROLINA.
XX XX
XX PI Nyce JW;
XX PI WPI; 1999-229400/19.
XX DR
XX XX
XX PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX PT vasoconstriction.
XX PS Disclosure; Page 38; 120pp; English.
XX XX
XX CC The specification describes antisense oligonucleotides (AA52869-X55271)
XX CC directed against at least 2 mRNAs selected from target genes, coding and
XX CC non-coding regions of RNAs corresponding to target genes, gene initiation
XX CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX CC end and the juxta-section between coding and non-coding regions and all
XX CC segments of RNAs encoding proteins associated with one or more diseases,
XX CC conditions or mixtures. The antisense oligonucleotides may be derived
XX CC from sequences AA55272-74. These multiple target oligonucleotides
XX CC (specifically AA55180-271) can be used for the antisense treatment of
XX CC diseases and conditions. Typical diseases and conditions are those
XX CC associated with impaired respiration and inflammation, including lung
XX CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX CC acute asthma, allergies, asthma, impeded respiration, respiratory
XX CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
XX CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
XX CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
XX CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
XX CC well as all types of cancers which may metastasize or have metastasized
XX CC to the lungs, including breast and prostate cancer
XX XX
XX SQ Sequence 15 BP; 2 A; 3 C; 9 G; 1 T; 0 U; 0 Other;
Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCATCG 15
||| |||||
Db 1 GGAGGGCGGCATCG 14
RESULT 24
ID AAA33030 standard; DNA; 15 BP.
XX AC AAA33030;
XX XX
XX DT 28-JUL-2000 (first entry)

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```

XX DE Low adenosine antisense oligonucleotide SEQ ID NO:719.
XX XX
XX KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
XX KW phosphothioate; impaired respiration; inflammation; allergy;
XX KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
XX KW antiallergic; antiasthmatic; cyostatic; analgesic; impaired airway;
XX KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
XX KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
XX KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
XX KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX OS Homo sapiens.
XX XX
XX PN WO200009525-A2.
XX PD
XX PD 24-FEB-2000.
XX XX
XX PF 03-AUG-1999; 99WO-US017712.
XX XX
XX PR 03-AUG-1998; 98US-0095212P.
XX XX
XX PA (UYEC-) UNIV EAST CAROLINA.
XX XX
XX PI Nyce JW;
XX PI WPI; 2000-205971/18.
XX DR
XX XX
XX PT New antisense oligonucleotides useful for treating e.g. pulmonary
XX PT vasoconstriction, inflammation, allergies, asthma, hypertension,
XX PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
XX PT cancers.
XX PS Claim 18; Page 356; 1343pp; English.
XX XX
XX CC The present invention describes a new composition comprising an antisense
XX CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
XX CC nucleic acids involved in bronchoconstriction, allergies, and/or
XX CC inflammation. The ON can have antiinflammatory, antiallergic,
XX CC antiasthmatic, cyostatic and analgesic activities. The compositions are
XX CC useful for the treatment of diseases associated with inflammation,
XX CC impaired airways, including lung disease and diseases whose secondary
XX CC effects afflict the lungs of a subject. They can be used for treating
XX CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
XX CC impeded respiration, respiratory distress syndrome, pain, cystic
XX CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
XX CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
XX CC carcinomas, and cancers which may metastasize to the lungs, including
XX CC breast and prostate cancer. The reduction of the adenosine content of the
XX CC ONs reduces side effects. The A-containing ONs break down with the
XX CC release of deoxyadenosine which activates adenosine receptors causing
XX CC bronchoconstriction and inflammation. AA32313 to AA35312 represent the
XX CC nucleotide sequences given in the sequence listing from the present
XX CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
XX CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
XX CC from the previously named sequences. SEQ ID NO:11 to 1680 (AA32323 to
XX CC AA33992) are specifically claimed ONs from the present invention. N.B.
XX CC Sequences given in the disclosure of the present invention do not match
XX CC up with their corresponding SEQ ID NO: sequences given in the sequence
XX CC listing
XX SQ Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCATCG 15
||| |||||
Db 2 GGAGGGCGGCATCG 15
RESULT 25

```

AAA33051
ID AAA33051 standard; DNA; 15 BP.
XX
AC AAA33051;
XX
DT 28-JUL-2000 (first entry)
XX
DE Low adenosine antisense oligonucleotide SEQ ID NO:740.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US017712.
XX
PF 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension, or
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.
XX
PS Claim 18; Page 359; 1343pp; English.
XX
CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1880 (AAA32323 to
CC AAA33992) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 15 BP; 2 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGCATCG 15
DB 1 GGAGGGCGCATGG 14
XX
RESULT 26
AAA03389
ID AAA03389 standard; DNA; 15 BP.
XX
AC AAA03389;
XX
DT 19-MAY-2000 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:673.
XX
KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
KW adenosine A2a receptor; adenosine A2 receptor; adenosine A3 receptor;
KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
KW endotoxin release; ARDS; acute respiratory distress syndrome;
KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
KW chronic obstructive pulmonary disease; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO9963938-A2.
XX
PD 16-DEC-1999.
XX
PF 08-JUN-1999; 99WO-US012775.
XX
PF 08-JUN-1998; 98US-0088501P.
XX
PR 09-JUN-1998; 98US-00093972.
XX
PR 09-JUN-1998; 98US-0088657P.
XX
PA (EPIC-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Hill JL;
XX
DR WPI; 2000-116433/10.
XX
PT Novel composition for treating or preventing e.g. cardiopulmonary and
PT renal injury.
XX
PS Claim 17; Page 34; 252pp; English.
XX
CC The present invention describes a pharmaceutical composition, comprising
CC at least one agent (I) that prevents, alleviates and/or inhibits
CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
CC (Ib), containing less than 15% adenosine (A), that is antisense to target
CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
CC ends or segments between coding and non-coding sequences), or to all
CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
CC and (Ib), and optionally also contains one or more surfactants. The
CC compositions are used to prevent, alleviate and/or treat adenosine
CC receptor-mediated cardiac, lung and/or renal damage or failure
CC (particularly where associated with ischaemia, toxin release and/or
CC administration of drugs or imaging agents, e.g. adenosine for treating
CC supraventricular tachycardia); (adult) respiratory distress syndrome
CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
CC pulmonary disease; cardiopulmonary hypoxia associated with administration
CC of stress-test agents, particularly where such conditions are associated
CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
CC AAA03715 represent specifically claimed phosphorothioate antisense
CC oligonucleotides for use in the composition of the present invention.
CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
CC phosphorothioate oligonucleotides used in the exemplification of the
CC present invention
XX

SQ Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 67.5%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 85;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
 |||||
 Db 2 GGAGGCGGCATGG 15

RESULT 27
 AAA03410
 ID AAA03410 standard; DNA; 15 BP.
 XX
 AC AAA03410;
 XX
 DT 19-MAY-2000 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:694.
 XX
 KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO9963938-A2.
 XX
 PD 16-DEC-1999.
 XX
 PF 08-JUN-1999; 99WO-US012775.
 XX
 PR 08-JUN-1998; 98US-0088501P.
 PR 09-JUN-1998; 98US-00093972.
 PR 09-JUN-1998; 98US-0088657P.
 XX
 PA (SPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Hill JL;
 XX
 PF WI; 2000-116433/10.
 XX
 PT Novel composition for treating or preventing e.g. cardiopulmonary and
 XX renal injury.
 PS Claim 17; Page 34; 252pp; English.
 XX

The present invention describes a pharmaceutical composition, comprising
 at least one agent (I) that prevents, alleviates and/or inhibits
 adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 (Ib), containing less than 15% adenosine (A), that is antisense to target
 genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 ends or segments between coding and non-coding sequences), or to all
 segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 and (Ib), and optionally also contains one or more surfactants. The
 compositions are used to prevent, alleviate and/or treat adenosine
 receptor-mediated cardiac, lung and/or renal damage or failure
 (particularly where associated with ischaemia, toxin release and/or
 administration of drugs or imaging agents, e.g. adenosine for treating
 supraventricular tachycardia); (adult) respiratory distress syndrome
 (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 pulmonary disease; cardiopulmonary hypoxia associated with administration
 of stress-test agents, particularly where such conditions are associated
 with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to

CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 67.5%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. NO. 85;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCATCG 15
 Db 2 GGAGGGCGGCATGG 15
 RESULT 29
 AAF19173
 ID AAF19173 standard; DNA; 15 BP.
 XX
 AC AAF19173;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #740.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 117; 1592pp; English.
 XX

CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 15 BP; 2 A; 3 C; 9 G; 1 T; 0 U; 0 Other;
 Query Match 67.5%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. NO. 85;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCATCG 15
 Db 1 GGAGGGCGGCATGG 14
 RESULT 30
 AAF45262/c
 ID AAF45262 standard; DNA; 15 BP.
 AC AAF45262;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGFBP2 oligonucleotide #101.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-2000; 2000WO-AU000693.
 XX
 PR 21-JUN-1999; 99US-0140345P.
 XX
 PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PI Wraight CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.
 XX
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 XX Example 6; Page 34; 201pp; English.
 PS
 XX The present invention relates to a method for ameliorating the effects of
 PS skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 XX Sequence 15 BP; 2 A; 8 C; 4 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 67.5%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 85;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GCGGGCGGCATCG 15
 Db 14 GCGGGTCGGCAGCG 1
 RESULT 31
 AAF45261/C
 ID AAF45261 standard; DNA; 15 BP.
 XX
 AC AAF45261;
 XX
 XX 30-MAR-2001 (first entry)
 DT
 DE IGFBP2 oligonucleotide #100.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200078341-A1.
 PN
 XX 28-DEC-2000.
 PD
 XX 21-JUN-2000; 2000WO-AU000693.
 PF
 XX 21-JUN-1999; 99US-0140345P.
 PR
 XX (MURD-) MURDOCH CHILDRENS RES INST.
 PA
 XX Wright CJ, Werther GA, Edmondson SR;
 PI
 XX WPI; 2001-041421/05.
 DR
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 XX Example 6; Page 34; 201pp; English.
 PS
 XX The present invention relates to a method for ameliorating the effects of
 PS skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 XX Sequence 15 BP; 1 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 67.5%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 85;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GCGGGCGGCATCG 15
 Db 15 GCGGGTCGGCAGCG 2
 RESULT 32
 ABZ94846
 ID ABZ94846 standard; DNA; 15 BP.
 XX
 AC ABZ94846;
 XX
 DT 17-OCT-2003 (first entry)
 DT
 XX Human adenosine A1 receptor antisense fragment no.709.
 DE
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW adenosine gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200285308-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-229219/22.
 DR
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 10088; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
|| |||||
DB 2 GGAGGGCGGCATGG 15

RESULT 33
ABZ94867
ID ABZ94867 standard; DNA; 15 BP.
XX
AC ABZ94867;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human adenosine A1 receptor antisense fragment no.730.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10109; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 15 BP; 2 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 67.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 85;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15
|| |||||
DB 1 GGAGGGCGGCATGG 14

RESULT 34
ABD18715
ID ABD18715 standard; DNA; 15 BP.
XX
AC ABD18715;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human adenosine A1 receptor oligonucleotide fragment 730.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

XX PS Claim 15; SEQ ID NO 10109; 763pp; English.

XX CC This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating

XX CC bronchoconstriction, respiratory tract inflammation, allergies and

XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The

XX CC oligonucleotides are derived from a gene encoding or regulating

XX CC expression of a target polypeptide associated with lung airway or lung

XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

XX CC The invention also describes a kit, that comprises: (a) a delivery

XX CC device, in separate containers, (b) the oligonucleotides, (c)

XX CC instructions for adding a carrier and for use of the kit. The composition

XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

XX CC beta-adrenergic agonist. The composition is useful for preventing or

XX CC treating a respiratory, lung or malignant disease. The administered

XX CC composition comprises oligo and is administered to reduce the production

XX CC or availability, or to increase the degradation of the target mRNA or to

XX CC reduce the amount of target polypeptide present in the lungs. The

XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung

XX CC inflammation, allergies and/or surfactant hypoproduction are associated

XX CC with a disease or condition such as pulmonary vasoconstriction,

XX CC inflammation, allergies, asthma, impeded respiration, respiratory

XX CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

XX CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.

XX CC The reduced adenosine content of the anti-sense oligos corresponding to

XX CC thymidines present in the target RNA serves to prevent the breakdown of

XX CC the oligonucleotides into products that free adenosine into the system

XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

XX CC prevent any unwanted effects due to it

XX CC

SQ Sequence 15 BP; 2 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 67.5%; Score 10.8; DB 1; Length 15;

Best Local Similarity 85.7%; Pred. No. 85;

Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15

Db 1 GGAGGGCGGCATGG 14

RESULT 35

ABD18694

ID ABD18694 standard; DNA; 15 BP.

AC ABD18694;

XX DT 29-JUL-2004 (first entry)

XX DE Human adenosine A1 receptor oligonucleotide fragment 709.

XX KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

XX KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

XX KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX KW pulmonary transplantation rejection; ds.

XX OS Homo sapiens.

XX PN WO200285309-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013143.

XX PR 24-APR-2001; 2001US-0286036P.

XX PA (EPIC-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shanabuddin S;

XX DR WPI; 2003-093058/08.

XX CC Pharmaceutical composition for treating asthma, has antisense

XX CC oligonucleotide containing less percentage of adenosine, targeted to

XX CC nucleic acids associated with lung airway or lung dysfunction, and

XX CC bronchodilating agent.

XX CC Claim 15; SEQ ID NO 10088; 763pp; English.

XX CC This invention describes a novel composition (a) a first active agent,

XX CC comprising oligonucleotides, effective for alleviating

XX CC bronchoconstriction, respiratory tract inflammation, allergies and

XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

XX CC surfactant depletion or hyposecretion, when administered to a mammal. The

XX CC oligonucleotides are derived from a gene encoding or regulating

XX CC expression of a target polypeptide associated with lung airway or lung

XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

XX CC The invention also describes a kit, that comprises: (a) a delivery

XX CC device, in separate containers, (b) the oligonucleotides, (c)

XX CC instructions for adding a carrier and for use of the kit. The composition

XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic, is a

XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

XX CC beta-adrenergic agonist. The composition is useful for preventing or

XX CC treating a respiratory, lung or malignant disease. The administered

XX CC composition comprises oligo and is administered to reduce the production

XX CC or availability, or to increase the degradation of the target mRNA or to

XX CC reduce the amount of target polypeptide present in the lungs. The

XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung

XX CC inflammation, allergies and/or surfactant hypoproduction are associated

XX CC with a disease or condition such as pulmonary vasoconstriction,

XX CC inflammation, allergies, asthma, impeded respiration, respiratory

XX CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

XX CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.

XX CC The reduced adenosine content of the anti-sense oligos corresponding to

XX CC thymidines present in the target RNA serves to prevent the breakdown of

XX CC the oligonucleotides into products that free adenosine into the system

XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

XX CC prevent any unwanted effects due to it

XX CC

SQ Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 67.5%; Score 10.8; DB 1; Length 15;

Best Local Similarity 85.7%; Pred. No. 85;

Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCATCG 15

Db 2 GGAGGGCGGCATGG 15

RESULT 36

AAV47234

ID AAV47234 standard; DNA; 12 BP.

XX AC AAV47234;

XX DT 10-NOV-1998 (first entry)

XX DE Antisense oligonucleotide 734, targeting adenosine A1 receptor.

XX KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;

XX KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;

XX KW allergy; emphysema; cystic fibrosis; ss.

XX OS Synthetic.

OS Homo sapiens.

```

XX FH Key Location/Qualifiers
XX FT modified_base 1..12
XX FT /tag= a
XX FT /note= "contains phosphorothioate internucleotide
XX FT linkages"
XX PN WO9823294-A1.
XX XX
XX PD 04-JUN-1998.
XX XX
XX PF 26-NOV-1997; 97WO-US022017.
XX XX
XX PR 26-NOV-1996; 96US-00757024.
XX XX
XX PA (UYEC-) UNIV EAST CAROLINA.
XX XX
XX PI Nyce JW;
XX XX
XX WPI; 1998-322464/28.
XX XX
XX Treating respiratory disease with antisense sequences directed against
XX PT adenosine or bradykinin receptors - with localised delivery to the
XX PT respiratory system, suitable for long term treatment of asthma, adult
XX PT respiratory distress syndrome etc.
XX XX
XX PS Claim 12; Page 8-24; 47pp; English.
XX XX
XX CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
XX CC human adenosine A1 receptor, the design of which required the secondary
XX CC structure of this targets mRNA. The adenosine receptor mRNA secondary
XX CC structure was both analysed and used to construct antisense
XX CC oligonucleotides containing a phosphorothioate backbone. Once the
XX CC antisense molecules are created they can be used to target their
XX CC predetermined target, thus causing the gene product to decrease. The
XX CC antisense oligonucleotides were targeted to specific mRNA regions
XX CC containing either a junction between the intron and exon, or where they
XX CC may overlap the initiation codon. The receptor is a member of the G-
XX CC protein coupled family of cell surface receptors that have 7-
XX CC transmembrane segments. These oligonucleotides can be used to treat or
XX CC prevent conditions associated with bronchoconstriction and/or lung
XX CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
XX CC allergy, emphysema and cystic fibrosis
XX XX
XX SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
XX XX
Query Match 65.0%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 76;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCAT 13
Db 1 GGAGGGCGGCAT 12
|| |||||
RESULT 37
AA53611
ID AAX53611 standard; DNA; 12 BP.
AC AAX53611;
XX XX
XX 05-JUL-1999 (first entry)
XX XX
XX Human adenosine A1 receptor antisense oligonucleotide fragment.
XX XX
XX Antisense oligonucleotide; multiple target; antisense treatment;
XX KW impaired respiration; inflammation; lung disease;
XX KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
XX KW acute asthma; allergy; asthma; impaired respiration;
XX KW respiratory distress syndrome; pain; cystic fibrosis;
XX KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
XX KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
XX KW colon cancer; breast cancer; lung cancer; pancreatic cancer;

```

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KW KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX XX prostate cancer; ss.
OS Synthetic.
XX XX WO9913886-A1.
XX XX
XX PD 25-MAR-1999.
XX XX
XX PF 17-SEP-1998; 98WO-US019419.
XX XX
XX PR 17-SEP-1997; 97US-0059160P.
XX PR 09-JUN-1998; 98US-00033972.
XX XX
XX PA (UYEC-) UNIV EAST CAROLINA.
XX XX
XX PI Nyce JW;
XX XX
XX WPI; 1999-229400/19.
XX XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX PT vasoconstriction.
XX XX
XX PS Disclosure; Page 38; 120pp; English.
XX XX
XX CC The specification describes antisense oligonucleotides (AAX52869-X55271)
XX CC directed against at least 2 mRNAs selected from target genes, coding and
XX CC non-coding regions of RNAs corresponding to target genes, gene initiation
XX CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX CC end and the juxta-section between coding and non-coding regions and all
XX CC segments of RNAs encoding proteins associated with one or more diseases,
XX CC conditions or mixtures. The antisense oligonucleotides may be derived
XX CC from sequences AAX5272-74. These multiple target oligonucleotides
XX CC (specifically AAX55180-271) can be used for the antisense treatment of
XX CC diseases and conditions. Typical diseases and conditions are those
XX CC associated with impaired respiration and inflammation, including lung
XX CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX CC acute asthma, allergies, asthma, impaired respiration, respiratory
XX CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
XX CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
XX CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
XX CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
XX CC well as all types of cancers which may metastasize or have metastasized
XX CC to the lungs, including breast and prostate cancer
XX XX
XX SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
XX XX
Query Match 65.0%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 76;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCAT 13
Db 1 GGAGGGCGGCAT 12
|| |||||
RESULT 38
AA53054
ID AAA33054 standard; DNA; 12 BP.
XX XX
XX AC AAA33054;
XX XX
XX 28-JUL-2000 (first entry)
XX XX
XX Low adenosine antisense oligonucleotide SEQ ID NO:743.
XX XX
XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
XX KW phosphorothioate; impaired respiration; inflammation; allergy;
XX KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
XX KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
XX KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
XX KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;

```


KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 OS Homo sapiens.
 XX WO200009525-A2.
 PN 24-FEB-2000.
 PD
 XX
 XX 03-AUG-1999; 99WO-US017712.
 PF
 XX
 XX 03-AUG-1998; 98US-0095212P.
 PR
 XX
 XX (UVEC-) UNIV EAST CAROLINA.
 PA
 XX
 XX Nyce JW;
 PI
 XX WPI; 2000-205971/18.
 DR
 XX
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 XX
 PS Claim 18; Page 359; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1880 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 65.0%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 76;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCAT 13
 DB 1 GGAGGGCGGCAT 12
 RESULT 39
 ID AAA03413 standard; DNA; 12 BP.
 XX
 XX AAA03413;
 XX
 XX 19-MAY-2000 (first entry)
 DT
 XX Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:697.
 DE
 XX

KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 XX WO9963938-A2.
 PN
 PD 16-DEC-1999.
 XX
 XX 08-JUN-1999; 99WO-US012775.
 PF
 XX
 XX 08-JUN-1998; 98US-0088501P.
 PR
 XX 09-JUN-1998; 98US-00093972.
 PR
 XX 09-JUN-1998; 98US-0088657P.
 XX
 XX (EPIC-) EPIGENESIS PHARM INC.
 PA
 XX
 XX Nyce JW, Hill JL;
 PI
 XX
 XX WPI; 2000-116433/10.
 DR
 XX
 XX Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 PT
 XX
 PS Claim 17; Page 34; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 65.0%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 76;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCAT 13
 DB 1 GGAGGGCGGCAT 12
 RESULT 40
 ID AAF19176 standard; DNA; 12 BP.
 XX
 XX AAF19176

AC AAF19176;
XX 14-MAR-2001 (first entry)
XX Human adenosine A1 receptor polynucleotide fragment #743.
DE
DE Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilation; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosolic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
XX Homo sapiens.
XX
XX WO200062736-A2.
XX
XX 26-OCT-2000.
XX
XX 24-MAR-2000; 2000WO-US008020.
XX
XX 06-APR-1999; 99US-0127958P.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX (NYCE/) NYCE J W.
XX
XX Nyce JW;
XX
XX WPI; 2000-679539/66.
DR
XX
XX Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
XX Claim 14; Page 117; 1592pp; English.
XX
XX The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytosolic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Best Local Similarity 91.7%; Pred. No. 76;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCGGCAT 13
DB 1 GGAGGGCGGCAT 12
RESULT 41
ABZ94870
ID ABZ94870 standard; DNA; 12 BP.
XX AC ABZ94870;
XX 17-OCT-2003 (first entry)
DT Human adenosine A1 receptor antisense fragment no.733.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytosolic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Millier S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 10112; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytosolic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Best Local Similarity 91.7%; Pred. No. 76;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
DB 1 GGAGGGCGGCAT 12

RESULT 42
ABD18718
ID ABD18718 standard; DNA; 12 BP.
AC ABD18718;
XX
XX 29-JUL-2004 (first entry)
XX
XX Human adenosine A1 receptor oligonucleotide fragment 733.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 10112; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies, and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ

Query Match 65.0%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 76;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
DB 1 GGAGGGCGGCAT 12

RESULT 43
AAV47212
ID AAV47212 standard; DNA; 13 BP.
XX
XX AAV47212;
XX
XX 10-NOV-1998 (first entry)
XX
XX Antisense oligonucleotide 712, targeting adenosine A1 receptor.
XX
XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..13
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide
FT linkages"
XX
XX WO9823294-A1.
XX
XX 04-JUN-1998.
XX
XX 26-NOV-1997; 97WO-US022017.
XX
XX 26-NOV-1996; 96US-00757024.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW;
XX
XX WPI; 1998-322464/28.
XX
XX Treating respiratory disease with antisense sequences directed against
PT adenosine or bradykinin receptors - with localised delivery to the
PT respiratory system, suitable for long term treatment of asthma, adult
PT respiratory distress syndrome etc.
XX
XX Claim 12; Page 8-24; 47pp; English.
XX
XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
CC human adenosine A1 receptor, the design of which required the secondary
CC structure of this targets mRNA. The adenosine receptor mRNA secondary
CC structure was both analysed and used to construct antisense
CC oligonucleotides containing a phosphorothioate backbone. Once the
CC antisense molecules are created they can be used to target their
CC predetermined target, thus causing the gene product to decrease. The
CC antisense oligonucleotides were targeted to specific mRNA regions
CC containing either a junction between the intron and exon, or where they

CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 13 BP; 2 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 65.0%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 86;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCAT 13
 DB 2 GGAGGGCGGCAT 13
 RESULT 44
 ID AAV47233 standard; DNA; 13 BP.
 XX
 AC AAV47233;
 XX
 DT 10-NOV-1998 (first entry)
 XX
 DE Antisense oligonucleotide 733, targeting adenosine A1 receptor.
 XX
 KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..13
 FT /*tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 PN WO9823294-A1.
 XX
 PD 04-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US022017.
 XX
 PR 26-NOV-1996; 96US-00757024.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1998-322464/28.
 XX
 PT Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX
 PS Claim 12; Page 8-24; 47pp; English.
 XX
 CC Sequences AAV4501-V4746 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-

CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 65.0%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 86;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCAT 13
 DB 1 GGAGGGCGGCAT 12
 RESULT 45
 AAX53589
 ID AAX53589 standard; DNA; 13 BP.
 XX
 AC AAX53589;
 XX
 DT 05-JUL-1999 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide fragment.
 XX
 KW Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthetic.
 XX
 PN WO913886-A1.
 XX
 PD 25-MAR-1999.
 XX
 PF 17-SEP-1998; 98WO-US019419.
 XX
 PR 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1999-229400/19.
 XX
 PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX
 PS Disclosure; Page 38; 120pp; English.
 XX
 CC The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC -end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,

CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas.
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 13 BP; 2 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 65.0%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 86;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGGCAT 13
 Db 2 CGAGGGCGGCAT 13
 RESULT 48
 AAA33053
 ID AAA33053 standard; DNA; 13 BP.
 AC AAA33053;
 XX
 DT 28-JUL-2000 (first entry)
 DE Low adenosine antisense oligonucleotide SEQ ID NO:742.
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX WO200009525-A2.
 XX 24-FEB-2000.
 XX
 PF 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 XX Nyce JW;
 XX WPI; 2000-205971/18.
 XX
 PT New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 PS Claim 18; Page 359; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are

CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 65.0%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 86;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGGCAT 13
 Db 1 CGAGGGCGGCAT 12
 RESULT 49
 AAA03391
 ID AAA03391 standard; DNA; 13 BP.
 XX
 AC AAA03391;
 XX
 DT 19-MAY-2000 (first entry)
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:675.
 KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine A2 receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO9963938-A2.
 XX
 PD 16-DEC-1999.
 XX
 PF 08-JUN-1999; 99WO-US012775.
 XX
 PR 08-JUN-1998; 98US-0088501P.
 PR 09-JUN-1998; 98US-00093972.
 PR 09-JUN-1998; 98US-0088657P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Hill JL;
 XX
 DR WPI; 2000-116433/10.
 XX
 PT Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX
 PS Claim 17; Page 34; 252pp; English.


```

PR 06-APR-1999; 99US-0127958P.
XX (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX Nyce JW;
XX WPI; 2000-679539/66.
XX
XX Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
XX Claim 14; Page 117; 1592pp; English.
XX
XX The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
XX Sequence 13 BP; 2 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 65.0%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 86;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
Db || |||||
2 GGAGGGCGGCAT 13

RESULT 52
AAF19175
ID AAF19175 standard; DNA; 13 BP.
XX
XX AAF19175;
XX
XX 14-MAR-2001 (first entry)
XX
XX Human adenosine A1 receptor polynucleotide fragment #742.
XX
XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosol;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;

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KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
XX Homo sapiens.
XX
XX WO200062736-A2.
XX
XX 26-OCT-2000.
XX
XX 24-MAR-2000; 2000WO-US008020.
XX
XX 06-APR-1999; 99US-0127958P.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX (NYCE/) NYCE J W.
XX
XX Nyce JW;
XX
XX WPI; 2000-679539/66.
XX
XX Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
XX Claim 14; Page 117; 1592pp; English.
XX
XX The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
XX Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
SQ
Query Match 65.0%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 86;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
Db || |||||
1 GGAGGGCGGCAT 12

RESULT 53
ABZ94848
ID ABZ94848 standard; DNA; 13 BP.
XX
XX ABZ94848;
AC

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XX DT 17-OCT-2003 (first entry)
XX DE Human adenosine A1 receptor antisense fragment no.711.
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX KW lung inflammation; respiratory disease; ds.
XX OS Homo sapiens.
XX PN WO200285308-A2.
XX PD 31-OCT-2002.
XX PF 23-APR-2002; 2002WO-US013135.
XX PR 24-APR-2001; 2001US-0286137P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-229219/22.
XX KW Pharmaceutical composition for treating ailments associated with impaired
XX PT respiration, has oligo(s) antisense to specific gene(s) or its
XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX PT ubiquinone.
XX PS Disclosure; SEQ ID NO 10090; 872pp; English.
XX CC The invention relates to a novel pharmaceutical composition, which has a
XX CC first active agent comprising an oligonucleotide antisense to the
XX CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX CC junctions of genes encoding a polypeptide associated with lung and/or
XX CC nasal airway dysfunction and a second active agent comprising an
XX CC antiinflammatory steroid and ubiquinone. A composition of the invention
XX CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX CC immunosuppressive, and cytostatic activity. The composition may have a
XX CC use in antisense gene therapy. The composition is useful for treating or
XX CC preventing a respiratory, lung or malignant disease or condition, also
XX CC for enhancing the prophylactic or therapeutic respiratory effect of an
XX CC antiinflammatory steroid in a subject, for reducing or depleting levels
XX CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX CC receptor, producing bronchodilation, increasing levels of ubiquinone or
XX CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX CC lung inflammation, lung allergies, or a respiratory disease or condition.
XX CC Note: The sequence data for this patent is not represented in the printed
XX CC specification, but was obtained in electronic format directly from WIPO
XX CC at ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 65.0%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. NO. 86;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GCGGGGGCGCAT 13
DB 2 GCGGGGGCGCAT 13
RESULT 54
ABZ94869
ID ABZ94869 standard; DNA; 13 BP.
XX AC ABZ94869;

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XX DT 17-OCT-2003 (first entry)
XX DE Human adenosine A1 receptor antisense fragment no.732.
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX KW lung inflammation; respiratory disease; ds.
XX OS Homo sapiens.
XX PN WO200285308-A2.
XX PD 31-OCT-2002.
XX PF 23-APR-2002; 2002WO-US013135.
XX PR 24-APR-2001; 2001US-0286137P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-229219/22.
XX KW Pharmaceutical composition for treating ailments associated with impaired
XX PT respiration, has oligo(s) antisense to specific gene(s) or its
XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX PT ubiquinone.
XX PS Disclosure; SEQ ID NO 10111; 872pp; English.
XX CC The invention relates to a novel pharmaceutical composition, which has a
XX CC first active agent comprising an oligonucleotide antisense to the
XX CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX CC junctions of genes encoding a polypeptide associated with lung and/or
XX CC nasal airway dysfunction and a second active agent comprising an
XX CC antiinflammatory steroid and ubiquinone. A composition of the invention
XX CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX CC immunosuppressive, and cytostatic activity. The composition may have a
XX CC use in antisense gene therapy. The composition is useful for treating or
XX CC preventing a respiratory, lung or malignant disease or condition, also
XX CC for enhancing the prophylactic or therapeutic respiratory effect of an
XX CC antiinflammatory steroid in a subject, for reducing or depleting levels
XX CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX CC receptor, producing bronchodilation, increasing levels of ubiquinone or
XX CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX CC lung inflammation, lung allergies, or a respiratory disease or condition.
XX CC Note: The sequence data for this patent is not represented in the printed
XX CC specification, but was obtained in electronic format directly from WIPO
XX CC at ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 65.0%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 86;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GCGGGGGCGCAT 13
DB 1 GCGGGGGCGCAT 12
RESULT 55
ABD18717
ID ABD18717 standard; DNA; 13 BP.
XX AC ABD18717;

```


CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it

SQ Sequence 13 BP; 2 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 86;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2 GGCGGGCGGCAT 13

|| |||||

Db 2 GGAGGGCGGCAT 13

RESULT 57

AAV47211

ID AAV47211 standard; DNA; 14 BP.

AC AAV47211;

DT 10-NOV-1998 (first entry)

XX Antisense oligonucleotide 711, targeting adenosine A1 receptor.

XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;

KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;

KW allergy; emphysema; cystic fibrosis; ss.

XX Synthetic.

OS Homo sapiens.

XX Key

Location/Qualifiers

FT modified_base 1..14

FT /*tag= a

FT /note= "contains phosphorothioate internucleotide

FT linkages"

XX WO9823294-A1.

XX 04-JUN-1998.

XX 26-NOV-1997; 97WO-US022017.

XX 26-NOV-1996; 96US-00757024.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 1998-322464/28.

XX Treating respiratory disease with antisense sequences directed against

PT adenosine or bradykinin receptors - with localised delivery to the

PT respiratory system, suitable for long term treatment of asthma, adult

PT respiratory distress syndrome etc.

XX Claim 12; Page 8-24; 47pp; English.

XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the

CC human adenosine A1 receptor, the design of which required the secondary

CC structure of this targets mRNA. The adenosine receptor mRNA secondary

CC structure was both analysed and used to construct antisense

CC oligonucleotides containing a phosphorothioate backbone. Once the

CC antisense molecules are created they can be used to target their

CC predetermined target, thus causing the gene product to decrease. The

CC antisense oligonucleotides were targeted to specific mRNA regions

CC containing either a junction between the intron and exon, or where they

CC may overlap the initiation codon. The receptor is a member of the G-

CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis

SQ Sequence 14 BP; 2 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;

Best Local Similarity 91.7%; Pred. No. 95;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2 GGCGGGCGGCAT 13

|| |||||

Db 2 GGAGGGCGGCAT 13

RESULT 58

AAV47189

ID AAV47189 standard; DNA; 14 BP.

AC AAV47189;

DT 10-NOV-1998 (first entry)

XX Antisense oligonucleotide 689, targeting adenosine A1 receptor.

XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;

KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;

KW allergy; emphysema; cystic fibrosis; ss.

XX Synthetic.

OS Homo sapiens.

XX Key

Location/Qualifiers

FT modified_base 1..14

FT /*tag= a

FT /note= "contains phosphorothioate internucleotide

FT linkages"

XX WO9823294-A1.

XX 04-JUN-1998.

XX 26-NOV-1997; 97WO-US022017.

XX 26-NOV-1996; 96US-00757024.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 1998-322464/28.

XX Treating respiratory disease with antisense sequences directed against

PT adenosine or bradykinin receptors - with localised delivery to the

PT respiratory system, suitable for long term treatment of asthma, adult

PT respiratory distress syndrome etc.

XX Claim 12; Page 8-24; 47pp; English.

XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the

CC human adenosine A1 receptor, the design of which required the secondary

CC structure of this targets mRNA. The adenosine receptor mRNA secondary

CC structure was both analysed and used to construct antisense

CC oligonucleotides containing a phosphorothioate backbone. Once the

CC antisense molecules are created they can be used to target their

CC predetermined target, thus causing the gene product to decrease. The

CC antisense oligonucleotides were targeted to specific mRNA regions

CC containing either a junction between the intron and exon, or where they

CC may overlap the initiation codon. The receptor is a member of the G-

CC protein coupled family of cell surface receptors that have 7-

CC transmembrane segments. These oligonucleotides can be used to treat or

CC prevent conditions associated with bronchoconstriction and/or lung
CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
CC allergy, emphysema and cystic fibrosis
XX
SQ Sequence 14 BP; 3 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;
Best Local Similarity 91.7%; Pred. No. 95;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GGCGGGCGGCAT 13
Db 3 GGAGGGCGGCAT 14

RESULT 59
AAAX53588
ID AAX53588 standard; DNA; 14 BP.
XX AC
XX AAX53588;
XX XX
DT 05-JUL-1999 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
XX WO9913886-A1.
XX
XX 25-MAR-1999.
XX
XX 17-SEP-1998; 98WO-US019419.
XX
XX 17-SEP-1997; 97US-0059160P.
XX 09-JUN-1998; 98US-00093972.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX
XX Nyce JW;
XX
XX WPI; 1999-229400/19.
XX
XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX vasoconstriction.
XX
XX
XX Disclosure; Page 38; 120pp; English.
XX
XX The specification describes antisense oligonucleotides (AAX52869-X55271)
XX directed against at least 2 mRNAs selected from target genes, coding and
XX non-coding regions of RNAs corresponding to target genes, gene initiation
XX codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX end and the juxta-section between coding and non-coding regions and all
XX segments of RNAs encoding proteins associated with one or more diseases,
XX conditions or mixtures. The antisense oligonucleotides may be derived
XX from sequences AAX55272-74. These multiple target oligonucleotides
XX (specifically AAX55180-271) can be used for the antisense treatment of
XX diseases and conditions. Typical diseases and conditions are those
XX associated with impaired respiration and inflammation, including lung
XX diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX acute asthma, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary

CC	disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC	colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC	hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC	well as all types of cancers which may metastasize or have metastasized
CC	to the lungs, including breast and prostate cancer
XX	
SQ	Sequence 14 BP; 2 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
	Query Match 65.0%; Score 10.4; DB 1; Length 14;
	Best Local Similarity 91.7%; Pred. No. 95;
	Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0
Qy	2 GCGGGGGCGGCAT 13
Db	2 GCGGGGGCGGCAT 13
RESULT 60	
AAX53566	
ID	AAX53566 standard; DNA; 14 BP.
XX	
AC	AAX53566;
XX	
DT	05-JUL-1999 (first entry)
XX	
DE	Human adenosine A1 receptor antisense oligonucleotide fragment.
XX	
KW	Antisense oligonucleotide; multiple target; antisense treatment;
KW	impaired respiration; inflammation; lung disease;
KW	pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW	acute asthma; allergy; asthma; impeded respiration;
KW	respiratory distress syndrome; pain; cystic fibrosis;
KW	pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW	chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW	colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW	hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW	prostate cancer; ss.
XX	
OS	Synthetic.
XX	
PN	W09913886-A1.
XX	
PD	25-MAR-1999.
XX	
PF	17-SEP-1998; 98WO-US019419.
XX	
PR	17-SEP-1997; 97US-0059160P.
PR	09-JUN-1998; 98US-00093972.
XX	
PA	(UYEC-) UNIV EAST CAROLINA.
XX	
PI	Nyce JW;
XX	
DR	WPI; 1999-229400/19.
XX	
PT	New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT	vasoconstriction.
XX	
PS	Disclosure; Page 38; 120pp; English.
XX	
CC	The specification describes antisense oligonucleotides (AAX52869-X5271)
CC	directed against at least 2 mRNAs selected from target genes, coding and
CC	non-coding regions of RNAs corresponding to target genes, gene initiation
CC	codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC	-end and the juxta-section between coding and non-coding regions and all
CC	segments of RNAs encoding proteins associated with one or more diseases,
CC	conditions or mixtures. The antisense oligonucleotides may be derived
CC	from sequences AAX55272-74. These multiple target oligonucleotides
CC	(specifically AAX55180-271) can be used for the antisense treatment of
CC	diseases and conditions. Typical diseases and conditions are those
CC	associated with impaired respiration and inflammation, including lung
CC	diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC	acute asthma, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer.
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX

SQ Sequence 14 BP; 3 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 65.0%; Score 10.4; DB 1; Length 14;
 Best Local Similarity 91.7%; Pred. No. 95;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
 || |||||
 DB 3 GGAGGGCGGCAT 14

RESULT 61
 AAA33009
 ID AAA33009 standard; DNA; 14 BP.

XX AAA33009;

XX 28-JUL-2000 (first entry)

XX Low adenosine antisense oligonucleotide SEQ ID NO:698.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytosstatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

XX WO200009525-A2.

XX 24-FEB-2000.

XX 03-AUG-1999; 99WO-US017712.

XX 03-AUG-1998; 98US-0095212P.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 2000-205971/18.

XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.

XX Claim 18; Page 354; 1343pp; English.

XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytosstatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,

CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing

XX SQ Sequence 14 BP; 3 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;
 Best Local Similarity 91.7%; Pred. No. 95;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13

DB 3 GGAGGGCGGCAT 14

RESULT 62

AAA33031

ID AAA33031 standard; DNA; 14 BP.

XX AAA33031;

XX 28-JUL-2000 (first entry)

XX Low adenosine antisense oligonucleotide SEQ ID NO:720.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytosstatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

XX WO200009525-A2.

XX 24-FEB-2000.

XX 03-AUG-1999; 99WO-US017712.

XX 03-AUG-1998; 98US-0095212P.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 2000-205971/18.

XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.

XX Claim 18; Page 356; 1343pp; English.

XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytosstatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,

CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONS reduces side effects. The A-containing ONS break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONS from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX

Sequence 14 BP; 2 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;
 Best Local Similarity 91.7%; Pred. No. 95;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGCAT 13
 || || || || || || || ||
 DB 2 CGAGGGCGGCAT 13

RESULT 63
 AAA03368
 ID AAA03368 standard; DNA; 14 BP.
 XX
 AC AAA03368;
 XX
 DT 19-MAY-2000 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:652.
 XX
 KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX

OS Homo sapiens.
 OS Synthetic.

PN WO9963938-A2.

PD 16-DEC-1999.

PF 08-JUN-1999; 99WO-US012775.

PR 08-JUN-1998; 98US-0088501P.

PR 09-JUN-1998; 98US-00093972.

PR 09-JUN-1998; 98US-0088657P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Hill JL;

XX WPI; 2000-116433/10.

XX Novel composition for treating or preventing e.g. cardiopulmonary and

XX renal injury.

XX Claim 17; Page 33; 252pp; English.

CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3',
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX

Sequence 14 BP; 3 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;
 Best Local Similarity 91.7%; Pred. No. 95;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGCAT 13
 || || || || || || || ||
 DB 3 CGAGGGCGGCAT 14

RESULT 64

AAA03390

ID AAA03390 standard; DNA; 14 BP.

AC AAA03390;

DT 19-MAY-2000 (first entry)

DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:674.

XX Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.

XX Homo sapiens.

OS Synthetic.

PN WO9963938-A2.

PD 16-DEC-1999.

PF 08-JUN-1999; 99WO-US012775.

PR 08-JUN-1998; 98US-0088501P.

PR 09-JUN-1998; 98US-00093972.

PR 09-JUN-1998; 98US-0088657P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Hill JL;

XX WPI; 2000-116433/10.

XX Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX
 PS Claim 17; Page 34; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention

XX Sequence 14 BP; 2 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;
 Best Local Similarity 91.7%; Pred. No. 95;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCAT 13
 || |||||
 Db 2 GGAGGGCGGCAT 13

RESULT 65

AAAF19153
 ID AAFA19153 standard; DNA; 14 BP.

XX AAF19153;

XX 14-MAR-2001 (first entry)

XX Human adenosine A1 receptor polynucleotide fragment #720.

XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.

XX Homo sapiens.

XX WO200062736-A2.

XX 26-OCT-2000.

XX 24-MAR-2000; 2000WO-US008020.

XX 06-APR-1999; 99US-0127958P.

XX (UYEC-) UNIV EAST CAROLINA.
 PA (UYEC/) NYCE J W.
 XX
 PT Nyce JW;

XX WPI; 2000-679539/66.

XX Low adenosine (A) content antisense oligonucleotides which do not trigger

PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.

XX Claim 14; Page 117; 1592pp; English.

XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAFA18434 to AAFA21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

XX Sequence 14 BP; 2 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;
 Best Local Similarity 91.7%; Pred. No. 95;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCAT 13
 || |||||
 Db 2 GGAGGGCGGCAT 13

RESULT 66

AAFA19131

ID AAFA19131 standard; DNA; 14 BP.

XX AAF19131;

XX 14-MAR-2001 (first entry)

XX Human adenosine A1 receptor polynucleotide fragment #598.

XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;

KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200062736-A2.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008020.
XX
PR 06-APR-1999; 99US-0127958P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
PI Nyce JW;
XX
XX WPI; 2000-679539/66.
DR
XX Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
PS Claim 14; Page 116; 1592pp; English.
XX
XX The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 14 BP; 3 A; 2 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;
Best Local Similarity 91.7%; Pred. No. 95;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
||| |||||
Db 3 GGAGGGCGGCAT 14

RESULT 67
ABZ94825
ID ABZ94825 standard; DNA; 14 BP.
XX
AC ABZ94825;
XX

DT 17-OCT-2003 (first entry)
XX
DE Human adenosine A1 receptor antisense fragment no.688.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EP1G-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
DR
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiqunone.
XX
XX Disclosure; SEQ ID NO 10067; 872pp; English.
PS
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiqunone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
CC receptor, producing bronchodilation, increasing levels of ubiqunone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 14 BP; 3 A; 2 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 65.0%; Score 10.4; DB 1; Length 14;
Best Local Similarity 91.7%; Pred. No. 95;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGCAT 13
||| |||||
Db 3 GGAGGGCGGCAT 14

RESULT 68
ABZ94847
ID ABZ94847 standard; DNA; 14 BP.
XX
AC ABZ94847;
XX

DT 17-OCT-2003 (first entry)
DE Human adenosine A1 receptor antisense fragment no.710.
XX
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiqunone.
XX
XX Disclosure; SEQ ID NO 10089; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiqunone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cyostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiqunone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the WIPO
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 14 BP; 2 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 65.0%; Score 10.4; DB 1; Length 14;
XX Best Local Similarity 91.7%; Pred. No. 95;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2 GGCGGGCGGCAT 13
XX ||| |||||
XX Db 2 GGAGGGCGGCAT 13
XX ||| |||||
XX
XX RESULT 69
XX ABD18695
XX ID ABD18695 standard; DNA; 14 BP.
XX
XX AC ABD18695;
XX
XX

DT 29-JUL-2004 (first entry)
DE Human adenosine A1 receptor oligonucleotide fragment 710.
XX
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ds.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 10089; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has antiallergic, antiinflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cyostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 14 BP; 2 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 65.0%; Score 10.4; DB 1; Length 14;
XX Best Local Similarity 91.7%; Pred. No. 95;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 SQ Sequence 10 BP; 0 A; 7 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GCGGGGGCGC 11
 |||||
 Db 10 GCGGGGGCGC 1

RESULT 72
 AAZ21077
 ID AAZ21077 standard; DNA; 10 BP.
 XX
 AC AAZ21077;
 XX
 DT 18-NOV-1999 (first entry)
 XX
 DE Human caveolin promoter Sp1-like binding sequence.
 XX
 KW LDL receptor; low density lipoprotein; steroid receptor element;
 KW caveolin; SRE; regulation; cell cycle; cholesterol; mitosis;
 KW cell division; anti-mitotic; inhibition; growth; proliferation; cancer;
 KW restenosis; atherosclerosis; heart disease; detection; lipid processing;
 KW diabetes; thyroid hormone deficiency; renal failure;
 KW inherited hyperlipidaemia; probe; ss.

XX Homo sapiens.
 OS
 XX
 PN WO9946592-A1.
 XX
 PD 16-SEP-1999.
 XX
 PF 08-MAR-1999; 99WO-US005146.
 XX
 PR 09-MAR-1998; 98US-0077351P.
 XX
 PA (REGC) UNIV CALIFORNTA.
 XX
 PI Fielding CJ, Fielding PE;
 XX
 DR WPI; 1999-551504/46.
 XX
 PT Detection of anti-mitotic agents for use in inhibiting the growth or
 PT proliferation of cells, e.g. in cancers or restenosis.
 XX

PS Example 5; Page 93; 135pp; English.
 XX
 CC A method has been developed for identifying anti-mitotic agents by
 CC detecting effects on cholesterol influx or efflux in cells or using a
 CC caveolin promoter-reporter gene construct. The method comprises: (1)
 CC contacting a cell with an agent to be tested for anti-mitotic activity;
 CC and (2) detecting the efflux of free cholesterol (FC) from the cell;
 CC where an increase in efflux of FC by the cell when contacted by the agent
 CC as compared to the cell under the same conditions lacking the agent
 CC indicates antimitotic activity of the agent. The method can be used for
 CC identifying agents for inhibiting the growth and/or proliferation of
 CC cells, more particularly the growth and proliferation of cancer cells,
 CC other transformed cells, or at other sites such as in aortic transplant
 CC subjects to restenosis. It can also be used for modulating cholesterol
 CC uptake in atherosclerosis and heart disease. It can also be used for
 CC detecting lipid processing by cells in pathologies such as diabetes,
 CC thyroid hormone deficiency, renal failure and inherited hyperlipidaemias.

CC The present sequence represents a human caveolin promoter sequence used
 CC in the exemplification of the present invention
 XX
 SQ Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GCGGGGGCGC 11
 |||||
 Db 1 GCGGGGGCGC 10

RESULT 73
 AAA34581/C
 ID AAA34581 standard; DNA; 10 BP.
 XX
 AC AAA34581;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Human adenosine receptor related polynucleotide SEQ ID NO:2270.
 XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cyostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 PF 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 CC New antisense oligonucleotides useful for treating e.g. pulmonary
 CC vasoconstriction, inflammation, allergies, asthma, hypertension, or
 CC bronchitis, emphysema, respiratory distress syndrome, ischemia or
 CC cancers.
 XX
 PS Disclosure; Page 549; 1343pp; English.
 XX

CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cyostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
 CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the

CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONS from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 10 BP; 0 A; 7 C; 3 G; 0 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGC 11
 Db 10 GGCGGGCGGC 1
 |||||
 RESULT 74
 AAF20703/c
 ID AAF20703 standard; DNA; 10 BP.
 XX
 AC AAF20703;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human C/EBP polynucleotide fragment #2270.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200062736-A2.
 XX
 XX 26-OCT-2000.
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 XX
 XX 06-APR-1999; 99US-0127958P.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 XX (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 XX
 XX WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 XX adenosine receptors during metabolism, useful e.g. for treating cancers
 XX and respiratory obstructions.
 XX
 XX Claim 14; Page 265; 1592pp; English.
 XX
 XX The present invention describes low adenosine (A) content antisense
 XX oligonucleotides and compositions (I) comprising them. In the antisense
 XX oligonucleotides the A is replaced by a 'Universal' or alternative base.
 XX (i) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 XX immunosuppressive, antiasthmatic, hypotensive and cyostatic activities.
 XX The antisense oligonucleotides and (I) can be used to down-regulate the
 XX expression and or activity of target polypeptides associated with
 XX lung/respiratory disorders and malignancies, such as stimulating and
 XX activating peptide factors and transmitters, transcription factors,

CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors. CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 10 BP; 0 A; 7 C; 3 G; 0 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGC 11
 Db 10 GGCGGGCGGC 1
 |||||
 RESULT 75
 ACA94708/c
 ID ACA94708 standard; DNA; 10 BP.
 XX
 AC ACA94708;
 XX
 DT 18-JUL-2003 (first entry)
 XX
 DE DNA tag from human transcript repressed in adenomas/cancers #241.
 XX
 KW Colorectal cancer; colorectal adenoma; ss; human; renal dipeptidase;
 KW macrophage inhibitory cytokine; MIC; RDP; faeces; blood;
 KW kidney proximal tubule.
 XX
 OS Homo sapiens.
 XX
 XX WO2003022863-A1.
 XX
 XX 20-MAR-2003.
 XX
 XX 09-SEP-2002; 2002WO-US028518.
 XX
 XX 07-SEP-2001; 2001US-0317494P.
 XX 30-MAY-2002; 2002US-0383805P.
 XX
 XX (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
 XX
 XX Buckhaults P, Kinzler KW, Vogelstein B;
 XX
 XX WPI; 2003-313220/30.
 XX
 XX Detecting colorectal cancer in a subject, involves detecting macrophage
 XX inhibitory cytokine or renal dipeptidase or their mRNA in feces or blood
 XX of the subject.
 XX
 XX Disclosure; Page 33; 59pp; English.
 XX
 XX The invention relates to detecting CC (colorectal cancer e.g. colorectal
 XX adenoma), comprising: (a) detecting macrophage inhibitory cytokine (MIC)
 XX or renal dipeptidase (RDP) in faeces or blood of a subject and comparing
 XX amount of MIC or RDP detected to that in normal subjects, where an

CC elevated amount of MIC or RDP in the subject is an indicator of CC in
 CC subject; (b) isolating mRNA sample from faeces of a subject, detecting
 CC MIC or RDP mRNA in the mRNA sample, and comparing amount of MIC or RDP
 CC mRNA detected to that in normal subjects, where an elevated amount of MIC
 CC or RDP mRNA in the subject is an indicator of CC in subject; (c)
 CC isolating epithelial cells from blood of a subject, isolating an mRNA
 CC sample from faeces of a subject or epithelial cells, detecting MIC or RDP
 CC mRNA in the mRNA sample, and comparing the amount of MIC or RDP mRNA in
 CC the mRNA sample to amounts of MIC or RDP mRNA in normal subjects, where
 CC an elevated amount of MIC or RDP mRNA in the mRNA sample is an indicative
 CC of CC in the subject; (d) contacting blood or faeces of a subject, with
 CC an RDP substrate, detecting activity of RDP in the blood or faeces by
 CC detection of increased reaction product or decreased RDP substrate, and
 CC comparing the amount of activity of RDP in blood or faeces of the subject
 CC to that in normal subjects, where an elevated amount of activity of RDP
 CC in the blood or faeces of the subject is an indicator of CC in the
 CC subject; (e) administering to a subject an antibody which specifically
 CC binds to RDP or an inhibitor of RDP, where the antibody or inhibitor is
 CC labeled with a moiety which is detectable from outside of the subject and
 CC detecting the moiety in the subject from outside of the subject, where an
 CC area of localisation of the moiety within the subject but outside the
 CC proximal tubules of the kidney identifies CC; or (f) administering to a
 CC subject a substrate for RDP, the substrate being labeled with a
 CC detectable moiety, isolating faeces or blood from the subject, and
 CC detecting in the faeces or blood RDP reaction product or RDP substrate
 CC with the detectable moiety, where increased product or decreased
 CC substrate in the faeces or blood indicates CC in the subject. The methods
 CC are useful for detecting colorectal cancer in a subject. The present
 CC sequence is a DNA tag derived from a human transcript whose expression is
 CC repressed in colorectal cancer or colorectal adenoma

XX
 SQ Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGGCGGCA 12
 |||||
 Db 10 GCGGGCGGCA 1

RESULT 76
 ABZ96397/c
 ID ABZ96397 standard; DNA; 10 BP.

AC ABZ96397;

DT 17-OCT-2003 (first entry)

DE Human C/EBP antisense fragment no.2257.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired
 respiration, has oligo(s) antisense to specific gene(s) or its
 corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 ubiquinone.

Disclosure; SEQ ID NO 11639; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a
 first active agent comprising an oligonucleotide antisense to the
 initiation codon, coding region, 5' or 3' end genomic flanking regions,
 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 junctions of genes encoding a polypeptide associated with lung and/or
 nasal airway dysfunction and a second active agent comprising an
 antiinflammatory steroid and ubiquinone. A composition of the invention
 has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 immunosuppressive, and cytostatic activity. The composition may have a
 use in antisense gene therapy. The composition is useful for treating or
 preventing a respiratory, lung or malignant disease or condition, also
 for enhancing the prophylactic or therapeutic respiratory effect of an
 antiinflammatory steroid in a subject, for reducing or depleting levels
 of, or reducing sensitivity to adenosine, reducing levels of adenosine
 receptor, producing bronchodilation, increasing levels of ubiquinone or
 lung surfactant in a subject's tissue, or treating bronchoconstriction,
 lung inflammation, lung allergies, or a respiratory disease or condition.
 Note: The sequence data for this patent is not represented in the printed
 specification, but was obtained in electronic format directly from WIPO
 at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 10 BP; 0 A; 7 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGCG 11
 |||||
 Db 10 GCGGGCGGCG 1

RESULT 77

ABD20306/c

ID ABD20306 standard; DNA; 10 BP.

AC ABD20306;

DT 29-JUL-2004 (first entry)

DE Human C/EBP DNA fragment 2257.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 11639; 763bp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 10 BP; 0 A; 7 C; 3 G; 0 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGGCGGC 11
 Db 10 GCGGGCGGC 1
 RESULT 78
 AAX55133/c
 ID AAX55133 standard; DNA; 11 BP.
 XX
 AC AAX55133;
 XX
 XX 05-JUL-1999 (first entry)
 DT
 XX C/EBP-beta antisense oligonucleotide fragment.
 DE
 XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergies; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;

KW prostate cancer; ss.
 XX
 OS Synthetic.
 XX
 PN WO9913886-A1.
 XX
 PD 25-MAR-1999.
 XX
 PF 17-SEP-1998; 98WO-US019419.
 XX
 PR 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 WPI; 1999-229400/19.
 XX
 PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX
 PS Disclosure; Page 71; 120pp; English.
 XX
 CC The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the junction between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 SQ Sequence 11 BP; 0 A; 8 C; 3 G; 0 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 83;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGGCGGC 11
 Db 11 GCGGGCGGC 2
 RESULT 79
 AAA34580/c
 ID AAA34580 standard; DNA; 11 BP.
 XX
 AC AAA34580;
 XX
 XX 28-JUL-2000 (first entry)
 DT
 XX Human adenosine receptor related polynucleotide SEQ ID NO:2269.
 DE
 XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; anti-inflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;

KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 OS Homo sapiens.
 XX WO200009525-A2.
 XX 24-FEB-2000.
 XX 03-AUG-1999; 99WO-US017712.
 XX 03-AUG-1998; 98US-0095212P.
 XX (UYEC-) UNIV EAST CAROLINA.
 PA Nyce JW;
 PI WPI; 2000-205971/18.
 DR
 XX
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 XX Disclosure; Page 549; 1343pp; English.
 PS
 XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impaired respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA3512 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 XX Sequence 11 BP; 0 A; 8 C; 3 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 62.5%; Score 10; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 83;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGCGCGC 11
 Db 11 GCGGCGCGC 2
 RESULT 80
 AAF20702/c
 ID AAF20702 standard; DNA; 11 BP.
 XX
 XX AAF20702;
 AC
 XX
 XX 14-MAR-2001 (first entry)
 DT
 XX
 XX Human C/EBP polynucleotide fragment #2269.
 DE
 XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;

KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO200062736-A2.
 XX 26-OCT-2000.
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 XX 06-APR-1999; 99US-0127958P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 PI
 XX WPI; 2000-679539/66.
 DR
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 CC adenosine receptors during metabolism, useful e.g. for treating cancers
 CC and respiratory obstructions.
 PT
 PT Claim 14; Page 265; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors and
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 XX Sequence 11 BP; 0 A; 8 C; 3 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 62.5%; Score 10; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 83;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGCGCGC 11
 Db 11 GCGGCGCGC 2

```

RESULT 81
ABZ96396/c
ID ABZ96396 standard; DNA; 11 BP.
XX AC
XX ABZ96396;
XX
DT 17-OCT-2003 (first entry)
XX DE
XX Human C/EBP antisense fragment no.2256.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
FN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 11638; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 11 BP; 0 A; 8 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11
| | | | | | | |
Db 11 GCGCGGCGGC 2

```

```

RESULT 82
ABD20305/c
ID ABD20305 standard; DNA; 11 BP.
XX AC
XX ABD20305;
XX
DT 29-JUL-2004 (first entry)
XX DE
XX Human C/EBP DNA fragment 2256.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
OS Homo sapiens.
XX
FN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 11638; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

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CC prevent any unwanted effects due to it
XX
SQ Sequence 11 BP; 0 A; 8 C; 3 G; 0 T; 0 U; 0 Other;

Query Match      62.5%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GCGGGCGGC 11
   |||||
Db 11 GCGGGCGGC 2

RESULT 83
AA55132/c
ID AAX55132 standard; DNA; 12 BP.
XX
AC AAX55132;
XX
DT 05-JUL-1999 (first entry)
XX
DE C/EBP-beta antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
WPI; 1999-229400/19.
XX
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 71; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,

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CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 12 BP; 0 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

Query Match      62.5%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 94;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GCGGGCGGC 11
   |||||
Db 12 GCGGGCGGC 3

RESULT 84
AAZ21076
ID AAZ21076 standard; DNA; 12 BP.
XX
AC AAZ21076;
XX
DT 18-NOV-1999 (first entry)
XX
DE Human caveolin promoter sequence.
XX
KW LDL receptor; low density lipoprotein; steroid receptor element;
KW caveolin; SRE; regulation; cell cycle; cholesterol; mitosis;
KW cell division; anti-mitotic; inhibition; growth; proliferation; cancer;
KW restenosis; atherosclerosis; heart disease; detection; lipid processing;
KW diabetes; thyroid hormone deficiency; renal failure;
KW inherited hyperlipidaemia; probe; ss.
XX
OS Homo sapiens.
XX
PN WO9946592-A1.
XX
PD 16-SEP-1999.
XX
PF 08-MAR-1999; 99WO-US005146.
XX
PR 09-MAR-1998; 98US-0077351P.
XX
PA (REGC ) UNIV CALIFORNIA.
XX
PI Fielding CJ, Fielding PE;
XX
WPI; 1999-551504/46.
XX
PT Detection of anti-mitotic agents for use in inhibiting the growth or
PT proliferation of cells, e.g. in cancers or restenosis.
XX
PS Example 5; Page 93; 135pp; English.
XX
CC A method has been developed for identifying anti-mitotic agents by
CC detecting effects on cholesterol influx or efflux in cells or using a
CC caveolin promoter-reporter gene construct. The method comprises: (1)
CC contacting a cell with an agent to be tested for anti-mitotic activity;
CC and (2) detecting the efflux of free cholesterol (FC) from the cell;
CC where an increase in efflux of FC by the cell when contacted by the agent
CC as compared to the cell under the same conditions lacking the agent
CC indicates antimitotic activity of the agent. The method can be used for
CC identifying agents for inhibiting the growth and/or proliferation of
CC cells, more particularly the growth and proliferation of cancer cells,
CC other transformed cells, or at other sites such as in aortic transplant
CC subjects to restenosis. It can also be used for modulating cholesterol
CC uptake in atherosclerosis and heart disease. It can also be used for
CC detecting lipid processing by cells in pathologies such as diabetes,
CC thyroid hormone deficiency, renal failure and inherited hyperlipidaemias.
CC The present sequence represents a human caveolin promoter sequence used
CC in the exemplification of the present invention
XX
SQ Sequence 12 BP; 0 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

```

Query Match 62.5%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 94;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
| | | | | | | | | |
DB 3 GCGGGCGGC 12

RESULT 85
AAA33993/c
ID AAA33993 standard; DNA; 12 BP.
XX
AC AAA33993;
XX
DT 28-JUL-2000 (first entry)
XX
DE Human adenosine receptor related polynucleotide SEQ ID NO:1682.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US017712.
XX
PR 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PS Disclosure; Page 473; 1343pp; English.

CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytotatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC AAA33992) are specifically claimed ONs from the present invention. N.B.

CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 12 BP; 0 A; 7 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 94;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
| | | | | | | | | |
DB 10 GCGGGCGGC 1

RESULT 86
AAA34579/c
ID AAA34579 standard; DNA; 12 BP.
XX
AC AAA34579;
XX
DT 28-JUL-2000 (first entry)
XX
DE Human adenosine receptor related polynucleotide SEQ ID NO:2268.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US017712.
XX
PR 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PS Disclosure; Page 549; 1343pp; English.

CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytotatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing

CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONS from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 12 BP; 0 A; 8 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 94;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGC 11
 Db 12 GCGCGGCGGC 3
 RESULT 87
 AAF20115/c
 ID AAF20115 standard; DNA; 12 BP.
 XX
 AC AAF20115;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Mismatch control molecule MM2 oligonucleotide #1682.
 XX
 KW Low adenose antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 PT Low adenose (A) content antisense oligonucleotides which do not trigger
 PT adenose receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 539; 1592pp; English.
 XX
 CC The present invention describes low adenose (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and

CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 12 BP; 0 A; 7 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 94;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGC 11
 Db 10 GCGCGGCGGC 1
 RESULT 89
 AAF20701/c
 ID AAF20701 standard; DNA; 12 BP.
 XX
 AC AAF20701;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human C/EBP polynucleotide fragment #2268.
 XX
 KW Low adenose antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 PT Low adenose (A) content antisense oligonucleotides which do not trigger
 PT adenose receptors during metabolism, useful e.g. for treating cancers

```

PT and respiratory obstructions.
XX
PS Claim 14; Page 265; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 12 BP; 0 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

Query Match          62.5%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 94;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGCGC 11
Db 12 GCGGGCGGCGC 3

RESULT 89
ABZ96395/c
ID ABZ96395 standard; DNA; 12 BP.
XX
AC ABZ96395;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human C/EBP antisense fragment no.2255.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.

and respiratory obstructions.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
WPI; 2003-229219/22.
XX
Pharmaceutical composition for treating ailments associated with impaired
respiration, has oligo(s) antisense to specific gene(s) or its
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
ubiquinone.
Disclosure; SEQ ID NO 11637; 872pp; English.
XX
The invention relates to a novel pharmaceutical composition, which has a
first active agent comprising an oligonucleotide antisense to the
initiation codon, coding region, 5' or 3' end genomic flanking regions,
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
junctions of genes encoding a polypeptide associated with lung and/or
nasal airway dysfunction and a second active agent comprising an
antiinflammatory steroid and ubiquinone. A composition of the invention
has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
immunosuppressive, and cytostatic activity. The composition may have a
use in antisense gene therapy. The composition is useful for treating or
preventing a respiratory, lung or malignant disease or condition, also
for enhancing the prophylactic or therapeutic respiratory effect of an
antiinflammatory steroid in a subject, for reducing or depleting levels
of, or reducing sensitivity to adenosine, reducing levels of adenosine
receptor, producing bronchodilation, increasing levels of ubiquinone or
lung surfactant in a subject's tissue, or treating bronchoconstriction,
lung inflammation, lung allergies, or a respiratory disease or condition.
Note: The sequence data for this patent is not represented in the printed
specification, but was obtained in electronic format directly from WIPO
at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 0 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

Query Match          62.5%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 94;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGCGC 11
Db 12 GCGGGCGGCGC 3

RESULT 90
ABZ95809/c
ID ABZ95809 standard; DNA; 12 BP.
XX
AC ABZ95809;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human nucleic acid sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.

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XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX Disclosure; SEQ ID NO 11051; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 0 A; 7 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 94;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGC 11
 Db |||||||||
 10 GCGCGGCGGC 1
 RESULT 91
 ABD20392/c
 ID ABD20392 standard; DNA; 12 BP.
 XX AC ABD20392;
 XX 29-JUL-2004 (first entry)
 XX Human pulmonary and inflammatory target DNA #3.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR

XX (EPIG-) EPIGENESIS PHARM INC.
 XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 11052; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, antiinflammatory, antiasthmatic, is a
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer.
 CC Transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 12 BP; 0 A; 7 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 94;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGC 11
 Db |||||||||
 10 GCGCGGCGGC 1
 RESULT 92
 ABD20304/c
 ID ABD20304 standard; DNA; 12 BP.
 XX AC ABD20304;
 XX 29-JUL-2004 (first entry)
 DT
 XX Human C/EBP DNA fragment 2255.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX Homo sapiens.
 XX WO200285309-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPTG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX Claim 15; SEQ ID NO 11637; 763pp; English.
 PS This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 12 BP; 0 A; 8 C; 4 G; 0 T; 0 U; 0 Other;
 SQ Query Match 62.5%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 94;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGC 11
 |||||
 Db 12 GCGCGGCGGC 3
 RESULT 93
 AAX55131/c
 ID AAX55131 standard; DNA; 13 BP.
 XX

AC AAX55131;
 XX 05-JUL-1999 (first entry)
 DE C/EBP-beta antisense oligonucleotide fragment.
 XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX Synthetic.
 XX OS
 XX WO9913886-A1.
 XX 25-MAR-1999.
 XX 17-SEP-1998; 98WO-US019419.
 XX 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX (UYEC-) UNIV EAST CAROLINA.
 XX Nyce JW;
 XX WPI; 1999-229400/19.
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX Disclosure; Page 71; 120pp; English.
 XX The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX Sequence 13 BP; 0 A; 9 C; 4 G; 0 T; 0 U; 0 Other;
 SQ Query Match 62.5%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGC 11
 |||||
 Db 13 GCGCGGCGGC 4
 RESULT 94
 AAA34578/c

ID AAA34578 standard; DNA; 13 BP.
 AC AAA34578;
 DT 28-JUL-2000 (first entry)
 XX Human adenosine receptor related polynucleotide SEQ ID NO:2267.
 DE
 XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 XX 24-FEB-2000.
 XX
 XX 03-AUG-1999; 99WO-US017712.
 XX
 XX 03-AUG-1998; 98US-0095212P.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX Nyce JW;
 PI
 XX WPI; 2000-205971/18.
 DR
 XX
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension, or
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 PS Disclosure; Page 549; 1343pp; English.
 XX
 XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytotatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impaired respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 13 BP; 0 A; 9 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGCGCGGC 11

Db
 RESULT 95
 AAF20700/c
 ID AAF20700 standard; DNA; 13 BP.
 XX
 AC AAF20700;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human C/EBP polynucleotide fragment #2267.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2000062736-A2.
 PN
 XX 26-OCT-2000.
 PD
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 XX 06-APR-1999; 99US-0127958P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 PI
 XX WPI; 2000-679539/66.
 DR
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 265; 1592pp; English.
 XX
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),

|||||
 13 GCGGCGCGGC 4

CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX

SQ Sequence 13 BP; 0 A; 9 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11

|||||

Db 13 GCGCGGCGGC 4

RESULT 96

ABH29468

ID ABH29468 standard; DNA; 13 BP.

XX

AC ABH29468;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 229445 for detecting SNP TSC0055973.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

XX WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX

PS Claim 1; SEQ ID NO 229445; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 0 A; 3 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGCGGCGCGG 10

|||||

Db 4 CGCGGCGCGG 13

RESULT 97

ABC99988

ID ABC99988 standard; DNA; 13 BP.

XX

AC ABC99988;

XX

DT 21-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 100005 for detecting SNP TSC0024859.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

XX WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX

PS Claim 1; SEQ ID NO 100005; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 0 A; 3 C; 10 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11

|||||

Db 1 GCGCGGCGGC 10

RESULT 98

ABH29471/c

ID ABH29471 standard; DNA; 13 BP.

XX

AC ABH29471;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 229448 for detecting SNP TSC0055973.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 0 A; 10 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
Db 13 GCGGGCGGC 4

RESULT 101
ABH29469/C
ID ABH29469 standard; DNA; 13 BP.
XX
AC ABH29469;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 229446 for detecting SNP TSC0055973.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
PS Claim 1; SEQ ID NO 229446; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 2 A; 8 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGGGGCGGG 10
Db 10 CGGGGGCGGG 1

RESULT 102
ADE14347
ID ADE14347 standard; DNA; 13 BP.
XX
AC ADE14347;
XX
DT 29-JAN-2004 (first entry)
XX
DE Optineurin promoter motif, repeat element or regulatory region #456.
XX
KW Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
KW SNP; glaucoma; progressive ocular hypertensive disorder;
KW glaucoma related disorder; motif; repeat element; regulatory region.
XX
OS Homo sapiens.
XX
PN US2003190617-A1.
XX
PD 09-OCT-2003.
XX
PF 06-MAR-2002; 2002US-00091281.
XX
PR 06-MAR-2002; 2002US-00091281.
XX
PA (SIEE/) SI E.
PA (RAYM/) RAYMOND V.
PA (MORI/) MORISSETTE J.
XX
PI Raymond V, Morissette J, Si E;
XX
DR WPI; 2003-864168/80.
XX
PT New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related disorders.
XX
PS Claim 11; SEQ ID NO 458; 159pp; English.
XX
CC The invention relates to an isolated nucleic acid (N1) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineurin promoter appearing as ADE13890. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin promoter, a host cell comprising the promoter operably linked to a heterologous sequence, diagnosing or prognosing glaucoma in a sample obtained from a cell or bodily fluid (comprising detecting a polymorphism in a promoter region of the optineurin gene, associated with a glaucoma phenotype), detecting a SNP sequence variation in a sample containing DNA, detecting the presence of an optineurin promoter sequence variation in a sample containing DNA, determining the presence or increased susceptibility to glaucoma or to a progressive ocular hypertensive disorder resulting in loss of visual field in a patient (or the severity or progression of glaucoma in a patient, comprising providing an amplification reaction primers that direct amplification of a selected nucleic acid region containing the variation within the optineurin promoter and amplifying the DNA) and detecting a polymorphism (comprising obtaining a sample containing human genomic DNA, providing a nucleic acid capable of detecting a SNP located within an optineurin promoter, and detecting the polymorphism). The invention is used to diagnose and prognose glaucoma and also to treat glaucoma related disorders. The present sequence is an optineurin promoter motif, repeat element or

CC putative regulatory region.
 XX Sequence 13 BP; 0 A; 4 C; 9 G; 0 T; 0 U; 0 Other;
 SQ

Query Match 62.5%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
 |||||
 Db 1 GCGGGCGGC 10

RESULT 103
 ABZ96394/c
 ID ABZ96394 standard; DNA; 13 BP.
 XX
 AC ABZ96394;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human C/EBP antisense fragment no.2254.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiseptic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 11636; 872pp; English.
 XX

CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiallergic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 0 A; 9 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
 |||||
 Db 13 GCGGGCGGC 4

RESULT 104
 ABD20303/c
 ID ABD20303 standard; DNA; 13 BP.
 XX
 AC ABD20303;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human C/EBPN DNA fragment 2254.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 11636; 763pp; English.
 XX

CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 XX Sequence 13 BP; 0 A; 9 C; 4 G; 0 T; 0 U; 0 Other;

SQ Query Match 62.5%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
 |||||
 Db 13 GGCGGGCGGC 4

RESULT 105
 AAX55130/c
 ID AAX55130 standard; DNA; 14 BP.
 AC AAX55130;
 XX
 DT 05-JUL-1999 (first entry)
 XX
 DE C/EBP-beta antisense oligonucleotide fragment.
 XX
 KW Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.

XX Synthetic.
 OS
 XX WO9913886-A1.
 PN
 XX 25-MAR-1999.
 PD
 XX 17-SEP-1998; 98WO-US019419.
 PF
 XX 17-SEP-1997; 97US-0059160P.
 PR
 XX 09-JUN-1998; 98US-00093972.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 XX Nyce JW;
 PI
 XX WPI; 1999-229400/19.
 DR
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 PT
 XX Disclosure; Page 71; 120pp; English.

XX The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all

CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX

SQ Sequence 14 BP; 0 A; 10 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 62.5%; Score 10; DB 1; Length 14;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
 |||||
 Db 14 GGCGGGCGGC 5

RESULT 106
 AAX34577/c
 ID AAA34577 standard; DNA; 14 BP.
 XX
 AC AAA34577;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Human adenosine receptor related polynucleotide SEQ ID NO:2266.
 XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.
 OS
 XX WO200009525-A2.
 PN
 XX 24-FEB-2000.
 PD
 XX 03-AUG-1999; 99WO-US017712.
 PF
 XX 03-AUG-1998; 98US-0095212P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX Nyce JW;
 PI
 XX WPI; 2000-205971/18.
 DR
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 PS Disclosure; Page 548; 1343pp; English.

XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,

CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONS reduces side effects. The A-containing ONS break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONS from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 14 BP; 0 A; 10 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 14;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
 DB 14 GCGGGCGGC 5

RESULT 107

AAF20699/c
 ID AAF20699 standard; DNA; 14 BP.

XX AAF20699;

XX 14-MAR-2001 (first entry)

DE Human C/EBP polynucleotide fragment #2266.

XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.

XX Homo sapiens.

OS WO200062736-A2.

XX 26-OCT-2000.

XX 24-MAR-2000; 2000WO-US008020.

XX 06-APR-1999; 99US-0127958P.

XX (UYEC-) UNIV EAST CAROLINA.

PA (NYCE/) NYCE J W.

XX Nyce JW;

XX WPI; 2000-679539/66.

XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers

PT and respiratory obstructions.

XX Claim 14; Page 265; 1592pp; English.

XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

XX Sequence 14 BP; 0 A; 10 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 62.5%; Score 10; DB 1; Length 14;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11

DB 14 GCGGGCGGC 5

RESULT 108

ABZ96393/c

ID ABZ96393 standard; DNA; 14 BP.

XX ABZ96393;

XX 17-OCT-2003 (first entry)

XX Human C/EBP antisense fragment no.2253.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX FH Key Location/Qualifiers
 FT modified_base 1. .13
 FT /*tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 XX WO9823294-A1.
 XX
 XX 04-JUN-1998.
 XX
 XX 26-NOV-1997; 97WO-US022017.
 XX
 XX 26-NOV-1996; 96US-00757024.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 XX
 XX Nyce JW;
 XX
 XX WPI; 1998-322464/28.
 XX
 XX Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX
 XX Claim 12; Page 8-24; 47pp; English.
 XX
 XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 XX Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 61.2%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATGG 13
 RESULT 111
 AAX53630
 ID AAX53630 standard; DNA; 13 BP.
 XX
 XX AAX53630;
 XX
 XX 05-JUL-1999 (first entry)
 XX
 XX Human adenosine A1 receptor antisense oligonucleotide fragment.
 XX
 XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;

KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 XX Synthetic.
 XX WO9913886-A1.
 XX
 XX 25-MAR-1999.
 XX
 XX 17-SEP-1998; 98WO-US019419.
 XX
 XX 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 XX
 XX Nyce JW;
 XX
 XX WPI; 1999-229400/19.
 XX
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 PT
 XX Disclosure; Page 39; 120pp; English.
 XX
 XX The specification describes antisense oligonucleotides (AAX52869-X55371)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX5272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 XX Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 61.2%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATGG 13
 RESULT 112
 AAX33073
 ID AAX33073 standard; DNA; 13 BP.
 XX
 XX AAX33073;
 XX
 XX 28-JUL-2000 (first entry)
 XX
 XX Low adenosine antisense oligonucleotide SEQ ID NO:762.
 DE
 XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; aniasthmatic; cytotatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;

KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 PN WO200009525-A2.
 PD 24-FEB-2000.
 XX
 XX 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 PS Claim 18; Page 361; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 61.2%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATCG 13
 |||||
 RESULT 113
 ID AAA03432
 ID AAA03432 standard; DNA; 13 BP.
 XX
 AC AAA03432;
 XX
 DT 19-MAY-2000 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:716.
 XX

KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 XX Homo sapiens.
 OS Synthetic.
 OS
 PN WO9963938-A2.
 XX
 PD 16-DEC-1999.
 XX
 XX 08-JUN-1999; 99WO-US012775.
 PF
 XX
 PR 08-JUN-1998; 98US-0088501P.
 PR 09-JUN-1998; 98US-00093972.
 PR 09-JUN-1998; 98US-0088657P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Hill JL;
 XX
 DR WPI; 2000-116433/10.
 XX
 PT Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX
 PS Claim 17; Page 34; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 61.2%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATCG 13
 |||||
 RESULT 114
 ID AAF19195
 ID AAF19195 standard; DNA; 13 BP.
 XX

AC AAF19195;
 XX 14-MAR-2001 (first entry)
 XX Human adenosine A1 receptor polynucleotide fragment #762.
 XX
 XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 XX Homo sapiens.
 XX
 XX WO200062736-A2.
 XX
 XX 26-OCT-2000.
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 XX
 XX 06-APR-1999; 99US-0127958P.
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (UYEC/) NYCE J W.
 PI Nyce JW;
 XX
 XX WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 XX Claim 14; Page 117; 1592pp; English.
 XX
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 XX Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 SQ

Best Local Similarity 84.6%; Pred. No. 1.2e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 DB 1 GAGGGCGGCATCG 13
 RESULT 115
 ABZ94889
 ID ABZ94889 standard; DNA; 13 BP.
 XX
 AC ABZ94889;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human adenosine A1 receptor antisense fragment no.752.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200285308-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013135.
 XX
 XX 24-APR-2001; 2001US-0286137P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-229219/22.
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiqunone.
 XX
 XX Disclosure; SEQ ID NO 10131; 872pp; English.
 XX
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiqunone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, and
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
 CC receptor, producing bronchodilation, increasing levels of ubiqunone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 61.2%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.2e+02; Mismatches 2; Indels 0; Gaps 0;
 Matches 11; Conservative 0;

QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATCG 13
 | ||||| |

RESULT 116
 ABD18737
 ID ABD18737 standard; DNA; 13 BP.
 XX
 AC ABD18737;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human adenosine A1 receptor oligonucleotide fragment 752.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPTG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI WPI; 2003-093058/08.
 DR
 XX
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 10131; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 61.2%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.2e+02;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGGGCGGCATCG 15

Db 1 GAGGGCGGCATCG 13
 | ||||| |

RESULT 117

AAV47252

ID AAV47252 standard; DNA; 14 BP.

XX AAV47252;

AC AAV47252;

XX 10-NOV-1998 (first entry)

XX Antisense oligonucleotide 752, targeting adenosine A1 receptor.

XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;

KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;

KW allergy; emphysema; cystic fibrosis; ss.

XX Synthetic.

OS Homo sapiens.

XX

XX Key Location/Qualifiers

FT modified_base 1..14

FT /tag= a

FT /note= "contains phosphorothioate internucleotide

FT linkages"

XX

XX WO9823294-A1.

XX 04-JUN-1998.

XX 26-NOV-1997; 97WO-US022017.

XX 26-NOV-1996; 96US-00757024.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 1998-322464/28.

XX Treating respiratory disease with antisense sequences directed against

XX adenosine or bradykinin receptors - with localised delivery to the

XX respiratory system, suitable for long term treatment of asthma, adult

XX respiratory distress syndrome etc.

XX Claim 12; Page 8-24; 47pp; English.

XX Sequences AAV46501-VA7446 are anti-sense oligonucleotides that target the

XX human adenosine A1 receptor, the design of which required the secondary

XX structure of this targets mRNA. The adenosine receptor mRNA secondary

XX structure was both analysed and used to construct antisense

XX oligonucleotides containing a phosphorothioate backbone. Once the

XX antisense molecules are created they can be used to target their

XX predetermined target, thus causing the gene product to decrease. The

XX antisense oligonucleotides were targeted to specific mRNA regions

XX containing either a junction between the intron and exon, or where they

CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis

XX
 SQ Sequence 14 BP; 2 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 61.2%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.3e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGGGCGGCATCG 15
 | | | | | | | | | |
 Db 1 GAGGGCGGCATGG 13

RESULT 118
 AAX53629
 ID AAX53629 standard; DNA; 14 BP.
 AC AAX53629;
 DT 05-JUL-1999 (first entry)
 XX Human adenosine A1 receptor antisense oligonucleotide fragment.
 DE
 XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impaired respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthetic.
 XX
 XX WO9913886-A1.
 PN
 XX
 XX 25-MAR-1999.
 PD
 XX
 XX 17-SEP-1998; 98WO-US019419.
 PF
 XX
 XX 17-SEP-1997; 97US-0059160P.
 PR
 XX 09-JUN-1998; 98US-00093972.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX
 XX Nyce JW;
 PI
 XX
 XX WPI; 1999-229400/19.
 DR
 XX
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 PT
 XX
 XX Disclosure; Page 39; 120pp; English.
 PS
 XX
 XX The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,

CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer

XX
 SQ Sequence 14 BP; 2 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 61.2%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.3e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGGGCGGCATCG 15
 | | | | | | | | | |
 Db 1 GAGGGCGGCATGG 13

RESULT 119
 AAA33072
 ID AAA33072 standard; DNA; 14 BP.
 XX
 AC AAA33072;
 DT 28-JUL-2000 (first entry)
 XX
 DE Low adenosine antisense oligonucleotide SEQ ID NO:761.
 XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200009525-A2.
 PN
 XX
 XX 24-FEB-2000.
 PD
 XX
 XX 03-AUG-1999; 99WO-US017712.
 PF
 XX
 XX 03-AUG-1998; 98US-0095212P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX
 XX Nyce JW;
 PI
 XX
 XX WPI; 2000-205971/18.
 DR
 XX
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 PT
 XX
 XX Claim 18; Page 361; 1343pp; English.
 PS
 XX
 XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive

CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONS reduces side effects. The A-containing ONS break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC AAA33992) are specifically claimed ONS from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 14 BP; 2 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 61.2%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 1.3e+02;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3 GCGGGCGGCATCG 15
Db 1 GAGGGCGGCATCG 13

RESULT 120
AAZ64806/c
ID AAZ64806 standard; RNA; 14 BP.
AC AAZ64806;
XX
DT 28-MAR-2000 (first entry)
XX
DE Substrate for hairpin ribozyme which cleaves HCV at nt. 5509.
XX
OS Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
KW cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
KW autoimmune disease; ss.
XX
OS Hepatitis C virus.
XX
PN WO9955847-A2.
XX
PD 04-NOV-1999.
XX
PF 26-APR-1999; 99WO-US009027.
XX
PR 27-APR-1998; 98US-0083217P.
PR 18-SEP-1998; 98US-0100842P.
PR 25-FEB-1999; 99US-00257608.
PR 23-MAR-1999; 99US-00274553.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D;
XX WPI; 2000-062023/05.
XX
PT Novel ribozymes for the treatment of diseases and conditions related to
PT hepatitis C infection.
XX
PS Claim 2; Page 98; 123pp; English.

CC The present sequence represents the preferred target sequence of an
CC enzymatic nucleic acid, especially a hairpin ribozyme, which cleaves the
CC Hepatitis C virus (HCV) RNA sequence at the base position given in the
CC descriptor line. The HCV sequence was screened for optimal ribozyme
CC target sites using a computer folding algorithm and regions of the mRNA
CC which did not form secondary folding structures and contained potential
CC ribozyme cleavage sites were identified. Ribozymes were synthesised to
CC target these sites and their activities optimised by either varying the
CC length of the binding arms or by modification to prevent degradation by

CC nucleases. The ribozymes of the invention inhibit gene expression and/or
CC viral replication, and are used to treat diseases associated with
CC Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
CC hepatocellular carcinoma. The ribozymes may be used in combination with
CC interferon to treat HCV infection, other infectious diseases, autoimmune
CC diseases, and cancer
XX
SQ Sequence 14 BP; 3 A; 5 C; 4 G; 0 T; 2 U; 0 Other;
Query Match 61.3%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 1.3e+02;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 CGGCGGGCGGCAT 13
Db 13 CGGCGAGCTGCAT 1

RESULT 121
AAA03431
ID AAA03431 standard; DNA; 14 BP.
XX
AC AAA03431;
XX
DT 19-MAY-2000 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:715.
XX
KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
KW endotoxin release; ARDS; acute respiratory distress syndrome;
KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
KW chronic obstructive pulmonary disease; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO9963938-A2.
XX
PD 16-DEC-1999.
XX
PF 08-JUN-1999; 99WO-US012775.
XX
PR 08-JUN-1998; 98US-0088501P.
PR 09-JUN-1998; 98US-00093972.
PR 09-JUN-1998; 98US-0088657P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Hill JL;
XX
DR WPI; 2000-116433/10.
XX
PT Novel composition for treating or preventing e.g. cardiopulmonary and
PT renal injury.
XX
PS Claim 17; Page 34; 252pp; English.

CC The present invention describes a pharmaceutical composition, comprising
CC at least one agent (I) that prevents, alleviates and/or inhibits
CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
CC (Ib), containing less than 15% adenosine (A), that is antisense to target
CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3',
CC ends or segments between coding and non-coding sequences), or to all
CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
CC and (Ib), and optionally also contains one or more surfactants. The
CC compositions are used to prevent, alleviate and/or treat adenosine
CC receptor-mediated cardiac, lung and/or renal damage or failure

CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 CC
 XX
 SQ Sequence 14 BP; 2 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 61.2%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.3e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATCG 13
 RESULT 122
 AAF19194
 ID AAF19194 standard; DNA; 14 BP.
 AC AAF19194;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #761.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 PT Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 117; 1592pp; English.
 XX
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.

CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 CC
 XX
 SQ Sequence 14 BP; 2 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 61.2%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.3e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATCG 13
 RESULT 123
 ABX01643/c
 ID ABX01643 standard; RNA; 14 BP.
 XX
 AC ABX01643;
 XX
 DT 23-DEC-2002 (first entry)
 XX
 DE Hepatitis C virus substrate #128 for HCV hairpin ribozyme #128.
 XX
 KW Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
 KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
 KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
 KW type I interferon; interferon alpha; interferon beta; cytostatic;
 KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
 KW substrate; hairpin ribozyme, HP ribozyme; ss.
 XX
 OS Hepatitis C virus.
 XX
 PN US2002082225-A1.
 XX
 PD 27-JUN-2002.
 XX
 PF 23-MAR-1999; 99US-00274553.
 XX
 PR 23-MAR-1999; 99US-00274553.
 XX
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J A.
 PA (ROBE/) ROBERTS B.
 PA (PAVC/) PAVCO P A.
 PA (MACE/) MACEJACK D.
 XX
 PI Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
 DR WPI; 2002-617759/66.
 XX

PT New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
 PT replication and are useful to treat hepatitis C virus infections and
 PT cirrhosis, liver failure or hepatocellular carcinoma.
 XX
 PS Claim 2; Page 62; 80pp; English.

CC The present invention relates to enzymatic nucleic acids which
 CC specifically cleave RNA derived from Hepatitis C virus (HCV). The
 CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
 CC (HP) motif where the binding arms comprise sequences complementary to one
 CC of the substrate sequences defined in the specification. The HCV
 CC ribozymes are useful for modulating the expression and/or replication of
 CC HCV. They can be used to treat cirrhosis, liver failure and/or
 CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating
 CC a condition associated with HCV infection in conjunction with one or more
 CC other drug therapies, particularly type I interferon, especially
 CC interferon alpha, beta or gamma or consensus interferon. The present
 CC sequence represents a substrate for a HCV hairpin (HP) ribozyme. Note:
 CC Some of the sequence data for this patent did not form part of the
 CC printed specification. The complete sequence data for this patent was
 CC obtained in electronic format directly from the USPTO web site at
 CC seqdata.uspto.gov/psipspIDEntry.html
 XX

SQ Sequence 14 BP; 3 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 61.3%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.3e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CGCGCGGCGGCAT 13
 Db 13 CGCGGAGCTGCAT 1

RESULT 124
 AEB76567/c
 ID AEB76567 standard; RNA; 14 BP.
 XX
 AC AEB76567;

DT 22-SEP-2005 (first entry)

DE Hepatitis C virus hairpin ribozyme substrate sequence.

XX ribozyme; enzymatic nucleic acid molecule; hepatitis C virus infection;
 KW antiviral; gene therapy; substrate; ss.

OS Hepatitis C virus.

PN US2002013458-A1.

XX 31-JAN-2002.

PF 15-FEB-2000; 2000US-00504231.

XX 23-MAR-1999; 99US-00274553.

XX (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

PA (ROBE/) ROBERTS E.

PA (PAVO/) PAVO P A.

PA (MACE/) MACEJACK D.

XX Blatt L, Mcswiggen JA, Roberts E, Pavo PA, Macejack D;

XX WPI; 2002-215899/27.

XX New enzymatic nucleic acid molecule, which specifically cleaves minus
 PT strand RNA derived from hepatitis C virus, useful for modulating the
 PT expression and/or replication of hepatitis C virus.

XX Example 1; Page 44; 65pp; English.

CC The invention relates to an enzymatic nucleic acid molecule which
 CC specifically cleaves minus strand RNA derived from hepatitis C virus
 CC (HCV). The binding arms of the molecule comprise ribozyme sequences. The
 CC molecule is selected from inozyme, G-cleaver, DNzyme, Amberzyme, and
 CC Zinzyme motifs. Also described: (1) a pharmaceutical composition
 CC comprising the novel enzymatic nucleic acid; (2) a mammalian cell
 CC including the novel enzymatic nucleic acid; (3) an expression vector
 CC comprising a nucleic acid sequence encoding at least one enzymatic
 CC nucleic acid molecule, in a manner, which allows expression of that
 CC molecule; (4) a mammalian cell including an expression vector of (3); (5)
 CC methods for treating cirrhosis, liver failure or hepatocellular carcinoma
 CC by administering to a patient the novel enzymatic nucleic acid or the
 CC vector of (3); (6) a method of treating a patient having a condition
 CC associated with HCV infection, by contacting cells of the patient with
 CC the nucleic acid molecule, and further employing one or more drug
 CC therapies; (7) a method for inhibiting HCV replication in a mammalian
 CC cell by administering the novel enzymatic nucleic acid; and (8) a method
 CC of cleaving a separate RNA molecule by contacting the novel enzymatic
 CC nucleic acid with the separate RNA molecule. The enzymatic nucleic acid
 CC is useful for modulating the expression and/or replication of hepatitis C
 CC virus (HCV), and for inhibiting the expression of HCV minus strand. The
 CC nucleic acid may also be used to treat or prevent the occurrence of a
 CC hairpin ribozyme target substrate sequence which represents an HCV
 CC exemplification of the present invention.

SQ Sequence 14 BP; 3 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 61.3%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.3e+02;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CGCGCGGCGGCAT 13
 Db 13 CGCGGAGCTGCAT 1

RESULT 125

ABZ94888
 ID ABZ94888 standard; DNA; 14 BP.

XX AC ABZ94888;

DT 17-OCT-2003 (first entry)

XX Human adenosine A1 receptor antisense fragment no.751.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 XX ubiquinone.
 PS Disclosure; SEQ ID NO 10130; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 14 BP; 2 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 61.2%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.3e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATCG 13
 RESULT 126
 ABD18736
 ID ABD18736 standard; DNA; 14 BP.
 AC ABD18736;
 XX
 XX 29-JUL-2004 (first entry)
 XX Human adenosine A1 receptor oligonucleotide fragment 751.
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO200285309-A2.
 PN
 XX
 XX 31-OCT-2002.
 PD
 XX
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX
 XX (EPIC-) EPIGENESIS PHARM INC.
 PA
 XX
 XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.
 DR
 XX

PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 XX bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 10130; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 14 BP; 2 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 61.2%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.3e+02;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCATCG 15
 Db 1 GAGGGCGGCATCG 13
 RESULT 127
 AAV47255
 ID AAV47255 standard; DNA; 11 BP.
 AC AAV47255;
 XX
 XX 10-NOV-1998 (first entry)
 XX
 XX Antisense oligonucleotide 755, targeting adenosine A1 receptor.
 DE Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..11
 FT /*tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 XX WO9823294-A1.

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XX PD 04-JUN-1998.
XX PF 26-NOV-1997; 97WO-US022017.
XX PR 26-NOV-1996; 96US-00757024.
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX DR WPI; 1998-322464/28.
XX PT Treating respiratory disease with antisense sequences directed against
XX PT adenosine or bradykinin receptors - with localised delivery to the
XX PT respiratory system, suitable for long term treatment of asthma, adult
XX PT respiratory distress syndrome etc.
XX PS Claim 12; Page 8-24; 47pp; English.
XX CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
XX CC human adenosine A1 receptor, the design of which required the secondary
XX CC structure of this targets mRNA. The adenosine receptor mRNA secondary
XX CC structure was both analysed and used to construct antisense
XX CC oligonucleotides containing a phosphorothioate backbone. Once the
XX CC antisense molecules are created they can be used to target their
XX CC predetermined target, thus causing the gene product to decrease. The
XX CC antisense oligonucleotides were targeted to specific mRNA regions
XX CC containing either a junction between the intron and exon, or where they
XX CC may overlap the initiation codon. The receptor is a member of the G-
XX CC protein coupled family of cell surface receptors that have 7-
XX CC transmembrane segments. These oligonucleotides can be used to treat or
XX CC prevent conditions associated with bronchoconstriction and/or lung
XX CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
XX CC allergy, emphysema and cystic fibrosis
XX SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCAT 13
DB 1 GAGGGCGGCAT 11

RESULT 128
AAV47235
ID AAV47235 standard; DNA; 11 BP.
XX AC AAV47235;
XX DT 10-NOV-1998 (first entry)
XX DE Antisense oligonucleotide 735, targeting adenosine A1 receptor.
XX KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
XX KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
XX KW allergy; emphysema; cystic fibrosis; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1..11
XX FT /*tag= a
XX FT /note= "contains phosphorothioate internucleotide
XX FT linkages"
XX PN WO9823294-A1.
XX PD 04-JUN-1998.
XX PF 26-NOV-1997; 97WO-US022017.

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XX PF 26-NOV-1997; 97WO-US022017.
XX PR 26-NOV-1996; 96US-00757024.
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX DR WPI; 1998-322464/28.
XX PT Treating respiratory disease with antisense sequences directed against
XX PT adenosine or bradykinin receptors - with localised delivery to the
XX PT respiratory system, suitable for long term treatment of asthma, adult
XX PT respiratory distress syndrome etc.
XX PS Claim 12; Page 8-24; 47pp; English.
XX CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
XX CC human adenosine A1 receptor, the design of which required the secondary
XX CC structure of this targets mRNA. The adenosine receptor mRNA secondary
XX CC structure was both analysed and used to construct antisense
XX CC oligonucleotides containing a phosphorothioate backbone. Once the
XX CC antisense molecules are created they can be used to target their
XX CC predetermined target, thus causing the gene product to decrease. The
XX CC antisense oligonucleotides were targeted to specific mRNA regions
XX CC containing either a junction between the intron and exon, or where they
XX CC may overlap the initiation codon. The receptor is a member of the G-
XX CC protein coupled family of cell surface receptors that have 7-
XX CC transmembrane segments. These oligonucleotides can be used to treat or
XX CC prevent conditions associated with bronchoconstriction and/or lung
XX CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
XX CC allergy, emphysema and cystic fibrosis
XX SQ Sequence 11 BP; 2 A; 2 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGCAT 12
DB 1 GCGGGCGGCAT 11

RESULT 129
AAV47292
ID AAV47292 standard; DNA; 11 BP.
XX AC AAV47292;
XX DT 10-NOV-1998 (first entry)
XX DE Antisense oligonucleotide 792, targeting adenosine A1 receptor.
XX KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
XX KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
XX KW allergy; emphysema; cystic fibrosis; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1..11
XX FT /*tag= a
XX FT /note= "contains phosphorothioate internucleotide
XX FT linkages"
XX PN WO9823294-A1.
XX PD 04-JUN-1998.
XX PF 26-NOV-1997; 97WO-US022017.

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XX PR 26-NOV-1996; 96US-00757024.
 XX PA (UYEC-) UNIV EAST CAROLINA.
 XX PI Nyce JW;
 XX DR WPI; 1998-322464/28.
 XX PT Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX PS Claim 12; Page 8-24; 47pp; English.
 XX CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5 GGCGGGCATCG 15
 | | | | | | | | |
 Db 1 GGCGGGCATCG 11
 RESULT 130
 AAX53632
 ID AAX53632 standard; DNA; 11 BP.
 AC AAX53632;
 XX 05-JUL-1999 (first entry)
 XX Human adenosine A1 receptor antisense oligonucleotide fragment.
 XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX Synthetic.
 XX WO9913886-A1.
 XX 25-MAR-1999.
 XX 17-SEP-1998; 98WO-US019419.
 XX 17-SEP-1997; 97US-0059160P.

PR 09-JUN-1998; 98US-00093972.
 XX (UYEC-) UNIV EAST CAROLINA.
 XX PI Nyce JW;
 XX DR WPI; 1999-229400/19.
 XX PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX PS Disclosure; Page 39; 120pp; English.
 XX CC The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC -end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GGCGGGCGCAT 13
 | | | | | | | | |
 Db 1 GAGGGCGGCAT 11
 RESULT 131
 AAX53612
 ID AAX53612 standard; DNA; 11 BP.
 AC AAX53612;
 XX 05-JUL-1999 (first entry)
 XX Human adenosine A1 receptor antisense oligonucleotide fragment.
 XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX Synthetic.
 XX WO9913886-A1.
 XX 25-MAR-1999.
 XX 17-SEP-1998; 98WO-US019419.

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XX 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX (UYBC-) UNIV EAST CAROLINA.
XX PA
XX NYce JW;
XX WPI; 1999-229400/19.
XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
XX Disclosure; Page 38; 120pp; English.
XX
XX The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
XX Sequence 11 BP; 2 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
SQ
Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGGCGGCGGCA 12
Db 1 GGAGGGCGGCA 11

RESULT 132
AAX53669
ID AAX53669 standard; DNA; 11 BP.
XX
XX AAX53669;
XX
XX 05-JUL-1999 (first entry)
XX
XX Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
XX Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
XX Synthetic.
OS
XX WO9913886-A1.
XX
XX 25-MAR-1999.
PD

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XX 17-SEP-1998; 98WO-US019419.
XX
XX 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
XX (UYBC-) UNIV EAST CAROLINA.
XX PA
XX NYce JW;
XX WPI; 1999-229400/19.
XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
XX Disclosure; Page 39; 120pp; English.
XX
XX The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
XX Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCGATCG 15
Db 1 GGGCGGCGATCG 11

RESULT 133
AAX33112
ID AAX33112 standard; DNA; 11 BP.
XX
XX AAX33112;
XX
XX 28-JUL-2000 (first entry)
XX
XX Low adenosine antisense oligonucleotide SEQ ID NO:801.
XX
XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
XX Homo sapiens.
OS
XX WO200009525-A2.
XX
XX 24-FEB-2000.
PD

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XX PF 03-AUG-1999; 99WO-US017712.
XX XX
XX PR 03-AUG-1998; 98US-0095212P.
XX XX
XX PA (UYEC-) UNIV EAST CAROLINA.
XX XX
XX PI Nyce JW;
XX XX
XX DR WPI; 2000-205971/18.
XX XX
XX PT New antisense oligonucleotides useful for treating e.g. pulmonary
XX PT vasoconstriction, inflammation, allergies, asthma, hypertension,
XX PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
XX PT cancers.
XX PS Claim 18; Page 366; 1343pp; English.
XX XX
XX CC The present invention describes a new composition comprising an antisense
XX CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
XX CC nucleic acids involved in bronchoconstriction, allergies, and/or
XX CC inflammation. The ON can have antiinflammatory, antiallergic,
XX CC antiasthmatic, cytostatic and analgesic activities. The compositions are
XX CC useful for the treatment of diseases associated with inflammation,
XX CC impaired airways, including lung disease and diseases whose secondary
XX CC effects afflict the lungs of a subject. They can be used for treating
XX CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
XX CC impeded respiration, respiratory distress syndrome, pain, cystic
XX CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
XX CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
XX CC carcinomas, and cancers which may metastasise to the lungs, including
XX CC breast and prostate cancer. The A-containing ONs break down with the
XX CC ONs reduces side effects. The A-containing ONs break down with the
XX CC release of deoxyadenosine which activates adenosine receptors causing
XX CC bronchoconstriction and inflammation. AAA32313 to AAA33312 represent the
XX CC nucleotide sequences given in the sequence listing from the present
XX CC invention, which correspond to SEQ ID NO:1 to 185, and then the last 185
XX CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
XX CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
XX CC AAA33992) are specifically claimed ONs from the present invention. N.B.
XX CC Sequences given in the disclosure of the present invention do not match
XX CC up with their corresponding SEQ ID NO: sequences given in the sequence
XX CC listing
XX XX
XX SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
XX XX
XX Query Match 58.7%; Score 9.4; DB 1; Length 11;
XX Best Local Similarity 90.9%; Pred. No. 1.1e+02;
XX Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 1 GGGCGGCATCG 11
| | | | | | | | | |
RESULT 134
AAA33075
ID AAA33075 standard; DNA; 11 BP.
XX XX
XX AC AAA33075;
XX XX
XX DT 28-JUL-2000 (first entry)
XX XX
XX DE Low adenosine antisense oligonucleotide SEQ ID NO:764.
XX XX
XX KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
XX KW phosphorothioate; impaired respiration; inflammation; allergy;
XX KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
XX KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
XX KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
XX KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
XX KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
XX KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

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XX OS Homo sapiens.
XX PN WO200009525-A2.
XX PD 24-FEB-2000.
XX XX
XX PF 03-AUG-1999; 99WO-US017712.
XX XX
XX PR 03-AUG-1998; 98US-0095212P.
XX XX
XX PA (UYEC-) UNIV EAST CAROLINA.
XX XX
XX PI Nyce JW;
XX XX
XX DR WPI; 2000-205971/18.
XX XX
XX PT New antisense oligonucleotides useful for treating e.g. pulmonary
XX PT vasoconstriction, inflammation, allergies, asthma, hypertension,
XX PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
XX PT cancers.
XX PS Claim 18; Page 362; 1343pp; English.
XX XX
XX CC The present invention describes a new composition comprising an antisense
XX CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
XX CC nucleic acids involved in bronchoconstriction, allergies, and/or
XX CC inflammation. The ON can have antiinflammatory, antiallergic,
XX CC antiasthmatic, cytostatic and analgesic activities. The compositions are
XX CC useful for the treatment of diseases associated with inflammation,
XX CC impaired airways, including lung disease and diseases whose secondary
XX CC effects afflict the lungs of a subject. They can be used for treating
XX CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
XX CC impeded respiration, respiratory distress syndrome, pain, cystic
XX CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
XX CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
XX CC carcinomas, and cancers which may metastasise to the lungs, including
XX CC breast and prostate cancer. The A-containing ONs break down with the
XX CC ONs reduces side effects. The A-containing ONs break down with the
XX CC release of deoxyadenosine which activates adenosine receptors causing
XX CC bronchoconstriction and inflammation. AAA32313 to AAA33312 represent the
XX CC nucleotide sequences given in the sequence listing from the present
XX CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
XX CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
XX CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
XX CC AAA33992) are specifically claimed ONs from the present invention. N.B.
XX CC Sequences given in the disclosure of the present invention do not match
XX CC up with their corresponding SEQ ID NO: sequences given in the sequence
XX CC listing
XX XX
XX SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
XX XX
XX Query Match 58.7%; Score 9.4; DB 1; Length 11;
XX Best Local Similarity 90.9%; Pred. No. 1.1e+02;
XX Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GGGCGGCATCG 13
Db 1 GAGGCGGCAT 11
| | | | | | | | | |
RESULT 135
AAA33055
ID AAA33055 standard; DNA; 11 BP.
XX XX
XX AC AAA33055;
XX XX
XX DT 28-JUL-2000 (first entry)
XX XX
XX DE Low adenosine antisense oligonucleotide SEQ ID NO:744.
XX KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
XX KW phosphorothioate; impaired respiration; inflammation; allergy;

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KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX Homo sapiens.
XX WO200009525-A2.
PN 24-FEB-2000.
XX 03-AUG-1999; 99WO-US017712.
XX 03-AUG-1998; 98US-0095212P.
XX (UYEC-) UNIV EAST CAROLINA.
XX Nyce JW;
XX WPI; 2000-205971/18.
XX New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.
XX Claim 18; Page 359; 1343pp; English.
XX The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA3233 to
CC AAA33992) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 11 BP; 2 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GCGGGCGGCGCA 12
||| |||||
DB 1 GGAGGGCGGCA 11
RESULT 136
AAA03471
ID AAA03471 standard; DNA; 11 BP.
XX
AC AAA03471;
XX

DT 19-MAY-2000 (first entry)
XX Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:755.
DE
XX
KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
KW endotoxin release; ARDS; acute respiratory distress syndrome;
KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
KW chronic obstructive pulmonary disease; ss.
XX Homo sapiens.
OS Synthetic.
XX WO9963938-A2.
PN 16-DEC-1999.
XX 08-JUN-1999; 99WO-US012775.
XX 08-JUN-1998; 98US-0088501P.
PR 09-JUN-1998; 98US-00093972.
PR 09-JUN-1998; 98US-0088657P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX Nyce JW, Hill JL;
XX WPI; 2000-116433/10.
XX Novel composition for treating or preventing e.g. cardiopulmonary and
PT renal injury.
XX Claim 17; Page 35; 252pp; English.
XX The present invention describes a pharmaceutical composition, comprising
CC at least one agent (I) that prevents, alleviates and/or inhibits
CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
CC (Ib), containing less than 15% adenosine (A), that is antisense to target
CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
CC ends or segments between coding and non-coding sequences), or to all
CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
CC and (Ib), and optionally also contains one or more surfactants. The
CC compositions are used to prevent, alleviate and/or treat adenosine
CC receptor-mediated cardiac, lung and/or renal damage or failure
CC (particularly where associated with ischaemia, toxin release and/or
CC administration of drugs or imaging agents, e.g. adenosine for treating
CC supraventricular tachycardia); (adult) respiratory distress syndrome
CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
CC pulmonary disease; cardiopulmonary hypoxia associated with administration
CC of stress-test agents, particularly where such conditions are associated
CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
CC AAA03715 represent specifically claimed phosphorothioate antisense
CC oligonucleotides for use in the composition of the present invention.
CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
CC phosphorothioate oligonucleotides used in the exemplification of the
CC present invention
XX
SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5 GCGGGCGGCGTCG 15
|||||||
DB 1 GCGGGCGGCGTCG 11

RESULT 137
 AAA03434
 ID AAA03434 standard; DNA; 11 BP.
 XX AC AAA03434;
 XX DT 19-MAY-2000 (first entry)
 XX DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:718.
 XX KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX OS Homo sapiens.
 XX OS Synthetic.
 XX PN WO9963938-A2.
 XX PD 16-DEC-1999.
 XX PF 08-JUN-1999; 99WO-US012775.
 XX PR 08-JUN-1998; 98US-0088501P.
 XX PR 09-JUN-1998; 98US-00093972.
 XX PR 09-JUN-1998; 98US-0088657P.
 XX PA (EPIG-) EPIGENESIS PHARM INC.
 XX PI Nyce JW, Hill JL;
 XX DR WPI; 2000-116433/10.
 XX PT Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX PS Claim 17; Page 34; 252pp; English.
 XX CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3',
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCAT 13
 DB 1 GAGGGCGGCAT 11
 RESULT 138
 AAA03414
 ID AAA03414 standard; DNA; 11 BP.
 XX AC AAA03414;
 XX DT 19-MAY-2000 (first entry)
 XX DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:698.
 XX KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX OS Homo sapiens.
 XX OS Synthetic.
 XX PN WO9963938-A2.
 XX PD 16-DEC-1999.
 XX PF 08-JUN-1999; 99WO-US012775.
 XX PR 08-JUN-1998; 98US-0088501P.
 XX PR 09-JUN-1998; 98US-00093972.
 XX PR 09-JUN-1998; 98US-0088657P.
 XX PA (EPIG-) EPIGENESIS PHARM INC.
 XX PI Nyce JW, Hill JL;
 XX DR WPI; 2000-116433/10.
 XX PT Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX PS Claim 17; Page 34; 252pp; English.
 XX CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3',
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention

XX SQ Sequence 11 BP; 2 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCA 12
 DB 1 GGAGGGCGGCA 11
 RESULT 139
 AAF19177
 ID AAF19177 standard; DNA; 11 BP.
 AC AAF19177;
 XX
 DT 14-MAR-2001 (first entry)
 DE Human adenosine A1 receptor polynucleotide fragment #744.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
 KW respiratory obstruction; pulmonary vasoconstriction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 XX WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 117; 1592pp; English.
 XX
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The

CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 11 BP; 2 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGCA 12
 DB 1 GGAGGGCGGCA 11
 RESULT 140
 AAF19234
 ID AAF19234 standard; DNA; 11 BP.
 XX
 AC AAF19234;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #801.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
 KW respiratory obstruction; pulmonary vasoconstriction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 PR 06-APR-1999; 99US-0127958P.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 XX WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 118; 1592pp; English.
 XX
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.

CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

XX SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15

DB 1 GGGCGGCATCG 11

RESULT 141

AAF19197

ID AAF19197 standard; DNA; 11 BP.

AC AAF19197;

XX 14-MAR-2001 (first entry)

DE Human adenosine A1 receptor polynucleotide fragment #764.

XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiaesthetic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.

XX Homo sapiens.

XX WO200062736-A2.

XX 26-OCT-2000.

XX 24-MAR-2000; 2000WO-US008020.

XX 06-APR-1999; 99US-0127958P.

XX (UYEC-) UNIV EAST CAROLINA.

XX (NYCE/) NYCE J W.

XX Nyce JW;

XX WPI; 2000-679539/66.

XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.

XX Claim 14; Page 117; 1592pp; English.

XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiaesthetic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction) and/or
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

XX SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 11;

Best Local Similarity 90.9%; Pred. No. 1.1e+02;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GGGCGGCATCG 13

DB 1 GAGGCGGCAT 11

RESULT 142

ID ABZ94891

XX ABZ94891 standard; DNA; 11 BP.

XX ABZ94891;

XX 17-OCT-2003 (first entry)

XX Human adenosine A1 receptor antisense fragment no.754.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
 KW antiaesthetic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

```

PR 24-APR-2001; 2001US-0286137P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 10133; 872pp; English.
XX
XX The invention relates to a novel pharmacological composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 11 BP; 2 A; 2 C; 2 G; 1 T; 0 U; 0 Other;
SQ
Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGCGGCAT 13
Db 1 GAGGCGGCAT 11
RESULT 143
ABZ94928
ID ABZ94928 standard; DNA; 11 BP.
XX
XX ABZ94928;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human adenosine A1 receptor antisense fragment no.791.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX

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PR 24-APR-2001; 2001US-0286137P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 10170; 872pp; English.
XX
XX The invention relates to a novel pharmacological composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5 GCGGCGGCATCG 15
Db 1 GCGGCGGCATCG 11
RESULT 144
ABZ94871
ID ABZ94871 standard; DNA; 11 BP.
XX
XX ABZ94871;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human adenosine A1 receptor antisense fragment no.734.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX

```


PR 24-APR-2001; 2001US-0286137P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA Nyece JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 10113; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 11 BP; 2 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGCGCA 12
 Db || |||||
 1 CGAGGCGCGCA 11
 RESULT 145
 ABD18739
 ID ABD18739 standard; DNA; 11 BP.
 AC ABD18739;
 XX
 XX 29-JUL-2004 (first entry)
 DE Human adenosine A1 receptor oligonucleotide fragment 754.
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 PD
 XX

PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA Nyece JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 10133; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGGCGCGCAT 13
 Db | |||||
 1 GAGGCGCGCAT 11
 RESULT 146
 ABD18719
 ID ABD18719 standard; DNA; 11 BP.
 XX
 XX ABD18719;
 AC
 XX 29-JUL-2004 (first entry)
 DT
 XX Human adenosine A1 receptor oligonucleotide fragment 734.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;

KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.

OS Homo sapiens.

PN WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPITG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.

XX Pharmacological composition for treating asthma, has antisease

PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX Claim 15; SEQ ID NO 10113; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 11 BP; 2 A; 2 C; 7 G; 0 T; 0 U; 0 Other;

SQ Query Match 58.7%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 1.1e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGCGCGCA 12
 ||| |||||
 Db 1 GGAGGCGCGCA 11

RESULT 147

ABD18776

ID ABD18776 standard; DNA; 11 BP.

XX ABD18776;

XX 29-JUL-2004 (first entry)

XX Human adenosine A1 receptor oligonucleotide fragment 791.

XX Human; antisease; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.

OS Homo sapiens.

PN WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPITG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.

XX Pharmacological composition for treating asthma, has antisease

PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 10170; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

```

SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match      58.7%; Score 9.4; DB 1; Length 11;
Best Local Similarity 90.9%; Pred. No. 1.1e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 1 GGGCGGCATCG 11
|||||

RESULT 148
AAQ47316/c
ID AAQ47316 standard; DNA; 12 BP.
XX
XX AAQ47316;
XX
XX 25-MAR-2003 (revised)
DT 16-SEP-1993 (first entry)
XX
XX Factor X inhibiting peptide N-terminal extension coding sequence.
DE
XX Factor Xa; inhibition; urinary trypsin inhibitor; Bikunin; elastase;
KW substitution; mutation; shock; drug; UTI; infestation; shock;
KW pancreatitis; ischaemic heart disease; rheumatoid arthritis; ss.
XX
XX Synthetic.
OS
XX EP543240-A1.
PN
XX 26-MAY-1993.
PD
XX 06-NOV-1992; 92EP-00119083.
PF
XX 08-NOV-1991; 91JP-00293472.
PR
XX 12-MAY-1992; 92JP-00119289.
XX
XX (MOCH ) MOCHIDA PHARM CO LTD.
PA
XX Morishita H, Kanamori T, Nobuhara M;
PI
XX WPI; 1993-168945/21.
DR
XX P-PSDB; AAR39758.
XX
XX New polypeptide inhibiting protease(s), esp. FXa - used for treating
PT multiple organ failure, shock, pancreatitis, disseminated intravascular
PT coagulation, etc.
PT
PS Claim 13; Page 80; 130pp; English.
XX
XX This sequence encodes peptide which may be joined to the N-terminal of
XX polypeptides which have factor Xa inhibition activity. These peptides are
XX based on a wild type sequence which coincides with part of the amino acid
XX sequence of urinary trypsin inhibitor (UTI) or Bikunins (H1-30). It is
XX different to both of these proteins however, in its factor Xa inhibiting
XX activity. Substitutions/mutations of the wild type sequence may increase
XX factor Xa inhibiting activity, improve secretion of the polypeptide from
XX the host cell or increase the ability of the protein to inhibit other
XX proteins, eg. elastase. These properties may also be effected by
XX supplementing one or more amino acids at the C- and/or N-terminal of
XX these proteins. These peptides may be used in drug compositions for the
XX prevention and/or treatment of infestation, shock, pancreatitis,
XX ischaemic heart disease and rheumatoid arthritis. (Updated on 25-MAR-2003
XX to correct PN field.)
XX
SQ Sequence 12 BP; 2 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGGCGGCATCGT 16
Db 1 GGGCGGCATCGT 11
|||||

Db 12 GGGCGGCATCGT 2

RESULT 149
AAV47291
ID AAV47291 standard; DNA; 12 BP.
XX
XX AAV47291;
AC
XX 10-NOV-1998 (first entry)
DT
XX
XX Antisense oligonucleotide 791, targeting adenosine A1 receptor.
DE
XX
XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT modified_base 1..12
FT /*tag= a
FT /notes="contains phosphorothioate internucleotide
FT linkages"
XX
XX WO9823294-A1.
PN
XX 04-JUN-1998.
PD
XX 26-NOV-1997; 97WO-US022017.
PF
XX 26-NOV-1996; 96US-00757024.
PR
XX (UYEC-) UNIV EAST CAROLINA.
PA
XX Nyce JW;
PI
XX WPI; 1998-322464/28.
DR
XX
XX Treating respiratory disease with antisense sequences directed against
PT adenosine or bradykinin receptors - with localised delivery to the
PT respiratory system, suitable for long term treatment of asthma, adult
PT respiratory distress syndrome etc.
PT
XX Claim 12; Page 8-24; 47pp; English.
XX
XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
XX human adenosine A1 receptor, the design of which required the secondary
XX structure of this targets mRNA. The adenosine receptor mRNA secondary
XX structure was both analysed and used to construct antisense
XX oligonucleotides containing a phosphorothioate backbone. Once the
XX antisense molecules are created they can be used to target their
XX predetermined target, thus causing the gene product to decrease. The
XX antisense oligonucleotides were targeted to specific mRNA regions
XX containing either a junction between the intron and exon, or where they
XX may overlap the initiation codon. The receptor is a member of the G-
XX protein coupled family of cell surface receptors that have 7-
XX transmembrane segments. These oligonucleotides can be used to treat or
XX prevent conditions associated with bronchoconstriction and/or lung
XX inflammation in humans or other animals e.g. asthma, pulmonary disease,
XX allergy, emphysema and cystic fibrosis
XX
SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
Query Match      58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 1 GGGCGGCATCG 11
|||||

```

```

RESULT 150
AAV47213
ID AAV47213 standard; DNA; 12 BP.
XX
XX
AC AAV47213;
XX
XX
DT 10-NOV-1998 (first entry)
XX
XX
DE Antisense oligonucleotide 713, targeting adenosine A1 receptor.
XX
XX
KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..12
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide
FT linkages"
XX
XX
PN WO9823294-A1.
XX
XX
PD 04-JUN-1998.
XX
XX
PF 26-NOV-1997; 97WO-US022017.
XX
XX
PR 26-NOV-1996; 96US-00757024.
XX
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
XX
PI Nyce JW;
XX
XX
DR WPI; 1998-322464/28.
XX
XX
PT Treating respiratory disease with antisense sequences directed against
PT adenosine or bradykinin receptors - with localised delivery to the
PT respiratory system, suitable for long term treatment of asthma, adult
PT respiratory distress syndrome etc.
XX
XX
PS Claim 12; Page 8-24; 47pp; English.
XX
XX
CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
CC human adenosine A1 receptor, the design of which required the secondary
CC structure of this targets mRNA. The adenosine receptor mRNA secondary
CC structure was both analysed and used to construct antisense
CC oligonucleotides containing a phosphorothioate backbone. Once the
CC antisense molecules are created they can be used to target their
CC predetermined target, thus causing the gene product to decrease. The
CC antisense oligonucleotides were targeted to specific mRNA regions
CC containing either a junction between the intron and exon, or where they
CC may overlap the initiation codon. The receptor is a member of the G-
CC protein coupled family of cell surface receptors that have 7-
CC transmembrane segments. These oligonucleotides can be used to treat or
CC prevent conditions associated with bronchoconstriction and/or lung
CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
CC allergy, emphysema and cystic fibrosis
XX
XX
SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGCA 12
||| |||||
DB 2 GGAGGCGGCA 12

RESULT 151

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```

AAV47273
ID AAV47273 standard; DNA; 12 BP.
XX
XX
AC AAV47273;
XX
XX
DT 10-NOV-1998 (first entry)
XX
XX
DE Antisense oligonucleotide 773, targeting adenosine A1 receptor.
XX
XX
KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..12
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide
FT linkages"
XX
XX
PN WO9823294-A1.
XX
XX
PD 04-JUN-1998.
XX
XX
PF 26-NOV-1997; 97WO-US022017.
XX
XX
PR 26-NOV-1996; 96US-00757024.
XX
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
XX
PI Nyce JW;
XX
XX
DR WPI; 1998-322464/28.
XX
XX
PT Treating respiratory disease with antisense sequences directed against
PT adenosine or bradykinin receptors - with localised delivery to the
PT respiratory system, suitable for long term treatment of asthma, adult
PT respiratory distress syndrome etc.
XX
XX
PS Claim 12; Page 8-24; 47pp; English.
XX
XX
CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
CC human adenosine A1 receptor, the design of which required the secondary
CC structure of this targets mRNA. The adenosine receptor mRNA secondary
CC structure was both analysed and used to construct antisense
CC oligonucleotides containing a phosphorothioate backbone. Once the
CC antisense molecules are created they can be used to target their
CC predetermined target, thus causing the gene product to decrease. The
CC antisense oligonucleotides were targeted to specific mRNA regions
CC containing either a junction between the intron and exon, or where they
CC may overlap the initiation codon. The receptor is a member of the G-
CC protein coupled family of cell surface receptors that have 7-
CC transmembrane segments. These oligonucleotides can be used to treat or
CC prevent conditions associated with bronchoconstriction and/or lung
CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
CC allergy, emphysema and cystic fibrosis
XX
XX
SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
||||| |||
DB 2 GGGCGGCATGG 12

RESULT 152
AAV47254
ID AAV47254 standard; DNA; 12 BP.

```

```

XX AC AAV47254;
XX DT 10-NOV-1998 (first entry)
XX DE Antisense oligonucleotide 754, targeting adenosine A1 receptor.
XX KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
XX KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
XX KW allergy; emphysema; cystic fibrosis; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX modified_base 1..12
XX FT /*tag= a
XX FT /note= "contains phosphorothioate internucleotide
XX FT linkages"
XX PN WO9823294-A1.
XX PD 04-JUN-1998.
XX PF 26-NOV-1997; 97WO-US022017.
XX PR 26-NOV-1996; 96US-00757024.
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX WPI; 1998-322464/28.
XX PT Treating respiratory disease with antisense sequences directed against
XX PT adenosine or bradykinin receptors - with localised delivery to the
XX PT respiratory system, suitable for long term treatment of asthma, adult
XX PT respiratory distress syndrome etc.
XX PS Claim 12; Page 8-24; 47pp; English.
XX CC Sequences AAV4501-V4746 are anti-sense oligonucleotides that target the
XX CC human adenosine A1 receptor, the design of which required the secondary
XX CC structure of this targets mRNA. The adenosine receptor mRNA secondary
XX CC structure was both analysed and used to construct antisense
XX CC oligonucleotides containing a phosphorothioate backbone. Once the
XX CC antisense molecules are created they can be used to target their
XX CC predetermined target, thus causing the gene product to decrease. The
XX CC antisense oligonucleotides were targeted to specific mRNA regions
XX CC containing either a junction between the intron and exon, or where they
XX CC may overlap the initiation codon. The receptor is a member of the G-
XX CC protein coupled family of cell surface receptors that have 7-
XX CC transmembrane segments. These oligonucleotides can be used to treat or
XX CC prevent conditions associated with bronchoconstriction and/or lung
XX CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
XX CC allergy, emphysema and cystic fibrosis
XX SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGGCGGCAT 13
Db 1 GAGGGCGGCAT 11
RESULT 153
AAV53650
ID AAV53650 standard; DNA; 12 BP.
XX AC AAV53650;

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XX DT 05-JUL-1999 (first entry)
XX DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX KW Antisense oligonucleotide; multiple target; antisense treatment;
XX KW impaired respiration; inflammation; lung disease;
XX KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
XX KW acute asthma; allergy; asthma; impeded respiration;
XX KW respiratory distress syndrome; pain; cystic fibrosis;
XX KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
XX KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
XX KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
XX KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX KW prostate cancer; ss.
XX OS Synthetic.
XX PN WO9913886-A1.
XX PD 25-MAR-1999.
XX PF 17-SEP-1998; 98WO-US019419.
XX PR 17-SEP-1997; 97US-0059160P.
XX PR 09-JUN-1998; 98US-00093972.
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX WPI; 1999-229400/19.
XX PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX PT vasoconstriction.
XX PS Disclosure; Page 39; 120pp; English.
XX CC The specification describes antisense oligonucleotides (AAV52869-X55271)
XX CC directed against at least 2 mRNAs selected from target genes, coding and
XX CC non-coding regions of RNAs corresponding to target genes, gene initiation
XX CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX CC end and the junction between coding and non-coding regions and all
XX CC segments of RNAs encoding proteins associated with one or more diseases,
XX CC conditions or mixtures. The antisense oligonucleotides may be derived
XX CC from sequences AAV5272-74. These multiple target oligonucleotides
XX CC (specifically AAV55180-271) can be used for the antisense treatment of
XX CC diseases and conditions. Typical diseases and conditions are those
XX CC associated with impaired respiration and inflammation, including lung
XX CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX CC acute asthma, allergies, asthma, impeded respiration, respiratory
XX CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
XX CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
XX CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
XX CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
XX CC well as all types of cancers which may metastasize or have metastasized
XX CC to the lungs, including breast and prostate cancer
XX SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5 GGGCGGCATCG 15
Db 2 GGGCGGCATGG 12
RESULT 154
AAV53668
ID AAV53668 standard; DNA; 12 BP.

```

```

XX AAX53668;
AC
XX
DT 05-JUL-1999 (first entry)
DE
XX Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
XX WO913886-A1.
XX
XX 25-MAR-1999.
XX
XX 17-SEP-1998; 98WO-US019419.
XX
XX 17-SEP-1997; 97US-0059160P.
XX 09-JUN-1998; 98US-00093972.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW;
XX
XX WPI; 1999-229400/19.
XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX vasoconstriction.
XX
XX Disclosure; Page 39; 120pp; English.
XX
XX The specification describes antisense oligonucleotides (AAX52869-X55271)
XX directed against at least 2 mRNAs selected from target genes, coding and
XX non-coding regions of RNAs corresponding to target genes, gene initiation
XX codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX end and the juxta-section between coding and non-coding regions and all
XX segments of RNAs encoding proteins associated with one or more diseases,
XX conditions or mixtures. The antisense oligonucleotides may be derived
XX from sequences AAX5272-74. These multiple target oligonucleotides
XX (specifically AAX5180-271) can be used for the antisense treatment of
XX diseases and conditions. Typical diseases and conditions are those
XX associated with impaired respiration and inflammation, including lung
XX diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX acute asthma, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
XX disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
XX colon cancer, breast cancer, lung cancer, pancreatic cancer,
XX hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
XX well as all types of cancers which may metastasize or have metastasized
XX to the lungs, including breast and prostate cancer
XX
XX Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 58.7%; Score 9.4; DB 1; Length 12;
XX Best Local Similarity 90.9%; Pred. No. 1.3e+02;
XX Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 5 GGGCGGCATCG 15
XX |||||
XX Db 1 GGGCGGCATGG 11
XX
XX RESULT 155

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```

AAX53590
ID AAX53590 standard; DNA; 12 BP.
XX
AC AAX53590;
XX
XX 05-JUL-1999 (first entry)
XX
XX Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
XX Antisense oligonucleotide; multiple target; antisense treatment;
XX impaired respiration; inflammation; lung disease;
XX pulmonary vasoconstriction; inflammation; allergic rhinitis;
XX acute asthma; allergy; asthma; impeded respiration;
XX respiratory distress syndrome; pain; cystic fibrosis;
XX pulmonary hypertension; pulmonary vasoconstriction; emphysema;
XX chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
XX colon cancer; breast cancer; lung cancer; pancreatic cancer;
XX hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX prostate cancer; ss.
XX
XX Synthetic.
XX
XX WO913886-A1.
XX
XX 25-MAR-1999.
XX
XX 17-SEP-1998; 98WO-US019419.
XX
XX 17-SEP-1997; 97US-0059160P.
XX 09-JUN-1998; 98US-00093972.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW;
XX
XX WPI; 1999-229400/19.
XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX vasoconstriction.
XX
XX Disclosure; Page 38; 120pp; English.
XX
XX The specification describes antisense oligonucleotides (AAX52869-X55271)
XX directed against at least 2 mRNAs selected from target genes, coding and
XX non-coding regions of RNAs corresponding to target genes, gene initiation
XX codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX end and the juxta-section between coding and non-coding regions and all
XX segments of RNAs encoding proteins associated with one or more diseases,
XX conditions or mixtures. The antisense oligonucleotides may be derived
XX from sequences AAX5272-74. These multiple target oligonucleotides
XX (specifically AAX5180-271) can be used for the antisense treatment of
XX diseases and conditions. Typical diseases and conditions are those
XX associated with impaired respiration and inflammation, including lung
XX diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX acute asthma, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
XX disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
XX colon cancer, breast cancer, lung cancer, pancreatic cancer,
XX hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
XX well as all types of cancers which may metastasize or have metastasized
XX to the lungs, including breast and prostate cancer
XX
XX Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 58.7%; Score 9.4; DB 1; Length 12;
XX Best Local Similarity 90.9%; Pred. No. 1.3e+02;
XX Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2 GGGCGGCGGCA 12
XX |||||
XX Db 2 GGGCGGCGGCA 12

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RESULT 156
AA53631
ID AAX53631 standard; DNA; 12 BP.
XX
AC AAX53631;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
DE Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impaired respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW chronic obstructive pulmonary disease; emphysema;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
XX 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 1999-229400/19.
XX
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 39; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC -end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impaired respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1 GAGGGCGGCAT 11
RESULT 157
AA33074
ID AAA33074 standard; DNA; 12 BP.
XX
AC AAA33074;
XX
DT 28-JUL-2000 (first entry)
XX
DE Low adenosine antisense oligonucleotide SEQ ID NO:763.
XX
DE Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiasthmatic; antiallergic; cytosstatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
XX 03-AUG-1999; 99WO-US017712.
XX
PR 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.
XX
PS Claim 18; Page 362; 1343pp; English.
XX
CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytosstatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impaired respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
CC carcinomas, and cancers which may metastasize to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32113 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC AAA33992) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

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Query Match          58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCAT 13
   | | | | | | | |
Db 1 GAGGGCGGCAT 11

RESULT 158
AAA33111
ID AAA33111 standard; DNA; 12 BP.
AC AAA33111;
XX
DT 28-JUL-2000 (first entry)
DE Low adenosine antisense oligonucleotide SEQ ID NO:800.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US017712.
XX
PR 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PS Claim 18; Page 366; 1343pp; English.
XX
CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytotatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impaired respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC AAA33992) are specifically claimed ONs from the present invention. N.B.

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CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
   Query Match          58.7%; Score 9.4; DB 1; Length 12;
   Best Local Similarity 90.9%; Pred. No. 1.3e+02;
   Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
   | | | | | | | |
Db 1 GGGCGGCATGG 11

RESULT 159
AAA33033
ID AAA33033 standard; DNA; 12 BP.
XX
AC AAA33033;
XX
DT 28-JUL-2000 (first entry)
DE Low adenosine antisense oligonucleotide SEQ ID NO:722.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US017712.
XX
PR 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PS Claim 18; Page 357; 1343pp; English.
XX
CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytotatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impaired respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing

```


CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX

SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGGGGGGGGCA 12

DB 2 GGAGGGGGCA 12

RESULT 162

AAA03452

ID AAA03452 standard; DNA; 12 BP.

AC AAA03452;

DT 19-MAY-2000 (first entry)

DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:736.

Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
 phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 endotoxin release; ARDS; acute respiratory distress syndrome;
 cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 supraventricular tachycardia; allergic rhinitis; acute inflammation;
 chronic obstructive pulmonary disease; ss.

OS Homo sapiens.

OS Synthetic.

PN WO9963938-A2.

PD 16-DEC-1999.

PF 08-JUN-1999; 99WO-US012775.

PR 08-JUN-1998; 98US-0088501P.

PR 09-JUN-1998; 98US-00093972.

PR 09-JUN-1998; 98US-0088657P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Hill JL;

XX WPI; 2000-116433/10.

XX Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 PT

BS Claim 17; Page 35; 252pp; English.
 XX The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX

SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;

Best Local Similarity 90.9%; Pred. No. 1.3e+02;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGGGGGCATCG 15

DB 2 GGGGGGGCATGG 12

RESULT 163

AAA03470

ID AAA03470 standard; DNA; 12 BP.

AC AAA03470;

DT 19-MAY-2000 (first entry)

DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:754.

Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
 phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 endotoxin release; ARDS; acute respiratory distress syndrome;
 cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 supraventricular tachycardia; allergic rhinitis; acute inflammation;
 chronic obstructive pulmonary disease; ss.

OS Homo sapiens.

OS Synthetic.

PN WO9963938-A2.

PD 16-DEC-1999.

PF 08-JUN-1999; 99WO-US012775.

PR 08-JUN-1998; 98US-0088501P.

PR 09-JUN-1998; 98US-00093972.

PR 09-JUN-1998; 98US-0088657P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Hill JL;

XX WPI; 2000-116433/10.
 XX Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX
 XX Claim 17; Page 35; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3',
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5 GCGCGGCATCG 15
 Db 1 GCGCGGCATCG 11
 RESULT 164
 AAA03433
 ID AAA03433 standard; DNA; 12 BP.
 XX
 AC AAA03433;
 XX
 XX 19-MAY-2000 (first entry)
 DT
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:717.
 XX
 KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 KW
 XX Homo sapiens.
 OS Synthetic.
 OS
 XX WO963938-A2.
 PN
 XX 16-DEC-1999.
 PD
 XX
 XX 08-JUN-1999; 99WO-US012775.
 PF
 XX
 XX 08-JUN-1998; 98US-0088501P.
 PR

PR 09-JUN-1998; 98US-00093972.
 XX 09-JUN-1998; 98US-008857P.
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Hill JL;
 PT WPI; 2000-116433/10.
 DR
 XX Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX
 PS Claim 17; Page 34; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3',
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGCGGCATCG 13
 Db 1 GAGGGCGCAT 11
 RESULT 165
 AAF19233
 ID AAF19233 standard; DNA; 12 BP.
 XX
 AC AAF19233;
 XX
 XX 14-MAR-2001 (first entry)
 DT
 DE Human adenosine A1 receptor polynucleotide fragment #800.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory bronchodilator; anti-inflammatory;
 KW immunosuppressive; antiallergic; analgesic; hypotensive; cytosstatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.

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XX  WO200062736-A2.
PN
XX
XX  26-OCT-2000.
PD
XX
XX  24-MAR-2000; 2000WO-US008020.
PF
XX
XX  06-APR-1999; 99US-0127958P.
PR
XX
XX  (UYEC-) UNIV EAST CAROLINA.
PA
XX  (NYCE/) NYCE J W.
PI
XX  Nyce JW;
XX
XX  WPI; 2000-679539/66.
XX
XX  Low adenosine (A) content antisense oligonucleotides which do not trigger
PT  adenosine receptors during metabolism, useful e.g. for treating cancers
PT  and respiratory obstructions.
XX
XX  Claim 14; Page 118; 1592pp; English.
XX
XX  The present invention describes low adenosine (A) content antisense
XX  oligonucleotides and compositions (I) comprising them. In the antisense
XX  oligonucleotides the A is replaced by a 'Universal' or alternative base.
XX  (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
XX  immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
XX  The antisense oligonucleotides and (I) can be used to down-regulate the
XX  expression and or activity of target polypeptides associated with
XX  lung/respiratory disorders and malignancies, such as stimulating and
XX  activating peptide factors and transmitters, transcription factors,
XX  immunoglobulins and antibodies, antibody receptors, cytokines and
XX  chemokines, endogenously produced specific and non-specific enzymes,
XX  binding proteins, adhesion molecules and their receptors, cytokine and
XX  chemokine receptors, adenosine receptors, bradykinin receptors, central
XX  nervous system (CNS) and peripheral nervous and non-nervous system
XX  receptors, CNS and peripheral nervous and non-nervous system peptide
XX  transmitters, defensins, growth factors, vasoactive peptides and
XX  receptors, binding proteins and malignancy associated proteins. The
XX  antisense oligonucleotides may be used in this way to treat disorders
XX  including respiratory obstruction (especially pulmonary obstruction
XX  and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
XX  surfactant hypoproduction which are associated with a disease or
XX  condition selected from pulmonary vasoconstriction, inflammation,
XX  allergies, asthma, impeded respiration, respiratory distress syndrome
XX  (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
XX  hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
XX  pulmonary transplantation rejection, pulmonary infections, bronchitis,
XX  and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
XX  fragments and antisense oligonucleotides used in the exemplification of
XX  the present invention
XX
XX  Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX  Query Match      58.7%; Score 9.4; DB 1; Length 12;
XX  Best Local Similarity 90.9%; Pred. No. 1.3e+02;
XX  Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
OY  5 GGGCGGCATCG 15
Db  1 GGGCGGCATGG 11
XX
RESULT 166
AAF19215
ID  AAF19215 standard; DNA; 12 BP.
XX
AC  AAF19215;
XX
XX  14-MAR-2001 (first entry)
XX
XX  Human adenosine A1 receptor polynucleotide fragment #782.
XX

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KW  Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW  human; airway disorder; bronchoconstriction; lung inflammation;
KW  surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW  immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW  respiratory obstruction; pulmonary obstruction; impeded respiration;
KW  surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW  respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW  pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW  chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW  cancer; ss.
XX
XX  Homo sapiens.
OS
XX
XX  WO200062736-A2.
PN
XX
XX  26-OCT-2000.
PD
XX
XX  24-MAR-2000; 2000WO-US008020.
PF
XX
XX  06-APR-1999; 99US-0127958P.
PR
XX
XX  (UYEC-) UNIV EAST CAROLINA.
PA
XX  (NYCE/) NYCE J W.
PI
XX  Nyce JW;
XX
XX  WPI; 2000-679539/66.
XX
XX  Low adenosine (A) content antisense oligonucleotides which do not trigger
PT  adenosine receptors during metabolism, useful e.g. for treating cancers
PT  and respiratory obstructions.
XX
XX  Claim 14; Page 118; 1592pp; English.
XX
XX  The present invention describes low adenosine (A) content antisense
XX  oligonucleotides and compositions (I) comprising them. In the antisense
XX  oligonucleotides the A is replaced by a 'Universal' or alternative base.
XX  (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
XX  immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
XX  The antisense oligonucleotides and (I) can be used to down-regulate the
XX  expression and or activity of target polypeptides associated with
XX  lung/respiratory disorders and malignancies, such as stimulating and
XX  activating peptide factors and transmitters, transcription factors,
XX  immunoglobulins and antibodies, antibody receptors, cytokines and
XX  chemokines, endogenously produced specific and non-specific enzymes,
XX  binding proteins, adhesion molecules and their receptors, cytokine and
XX  chemokine receptors, adenosine receptors, bradykinin receptors, central
XX  nervous system (CNS) and peripheral nervous and non-nervous system
XX  receptors, CNS and peripheral nervous and non-nervous system peptide
XX  transmitters, defensins, growth factors, vasoactive peptides and
XX  receptors, binding proteins and malignancy associated proteins. The
XX  antisense oligonucleotides may be used in this way to treat disorders
XX  including respiratory obstruction (especially pulmonary obstruction
XX  and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
XX  surfactant hypoproduction which are associated with a disease or
XX  condition selected from pulmonary vasoconstriction, inflammation,
XX  allergies, asthma, impeded respiration, respiratory distress syndrome
XX  (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
XX  hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
XX  pulmonary transplantation rejection, pulmonary infections, bronchitis,
XX  and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
XX  fragments and antisense oligonucleotides used in the exemplification of
XX  the present invention
XX
XX  Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX  Query Match      58.7%; Score 9.4; DB 1; Length 12;
XX  Best Local Similarity 90.9%; Pred. No. 1.3e+02;
XX  Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
OY  5 GGGCGGCATCG 15
Db  2 GGGCGGCATGG 12
XX

```

CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 XX
 QY 3 GCGGGCGGCAT 13
 Db 1 GAGGGCGGCAT 11
 RESULT 168
 AAF19155
 ID AAF19155 standard; DNA; 12 BP.
 XX
 AC AAF19155;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #722.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosstatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 FI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 PT Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 117; 1592pp; English.
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytosstatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide

CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

XX SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGCA 12
 || |||||
 Db 2 GGAGGGCGGCA 12

RESULT 169
 ABZ94890
 ID ABZ94890 standard; DNA; 12 BP.
 AC ABZ94890;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human adenosine A1 receptor antisense fragment no.753.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
 XX WO200285308-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013135.
 XX 24-APR-2001; 2001US-0286137P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 10132; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, and
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCAT 13
 || |||||
 Db 1 GAGGGCGGCAT 11

RESULT 170
 ABZ94909
 ID ABZ94909 standard; DNA; 12 BP.
 AC ABZ94909;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human adenosine A1 receptor antisense fragment no.772.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
 XX WO200285308-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013135.
 XX 24-APR-2001; 2001US-0286137P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 10151; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, increasing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
 |||||
 Db 2 GGGCGGCATCG 12

RESULT 171

ABZ94927
 ID ABZ94927 standard; DNA; 12 BP.

XX AC ABZ94927;

XX 17-OCT-2003 (first entry)

XX Human adenosine A1 receptor antisense fragment no.790.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 10169; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, increasing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
 |||||
 Db 1 GGGCGGCATCG 11

RESULT 172

ABZ94849
 ID ABZ94849 standard; DNA; 12 BP.

XX AC ABZ94849;

XX 17-OCT-2003 (first entry)

XX Human adenosine A1 receptor antisense fragment no.712.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 10091; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, and
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory bronchoconstriction.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGGCA 12
 DB 2 CGAGGGCGGCA 12
 || |||||
 || |||||
 RESULT 173
 ABD18757
 ID ABD18757 standard; DNA; 12 BP.
 AC ABD18757;
 XX
 DT 29-JUL-2004 (first entry)
 DE Human adenosine A1 receptor oligonucleotide fragment 772.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 FT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 10151; 763pp; English.
 PS
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5 GGGCGGCGTCG 15
 DB 2 GGGCGGCGTCG 12
 RESULT 174
 ABD18775
 ID ABD18775 standard; DNA; 12 BP.
 AC ABD18775;
 XX
 DT 29-JUL-2004 (first entry)
 DE Human adenosine A1 receptor oligonucleotide fragment 790.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR


```

XX PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 10169; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGCGCGCATCG 15
Db 1 GGCGCGCATGG 11
|||||||

RESULT 175
ABD18697
ID ABD18697 standard; DNA; 12 BP.
XX
XX ABD18697;
XX
XX 29-JUL-2004 (first entry)
XX
XX Human adenosine A1 receptor oligonucleotide fragment 712.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ds.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX

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PD 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 10091; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGCGCGCA 12
Db 2 GGAGGGCGGCA 12
|||||||

RESULT 176
ABD18738
ID ABD18738 standard; DNA; 12 BP.
XX
XX ABD18738;
XX
XX 29-JUL-2004 (first entry)
XX
XX Human adenosine A1 receptor oligonucleotide fragment 753.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

```

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahbuddin S;
 PI
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 10132; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX

SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCAT 13
 | | | | |
 Db 1 GAGGGCGGCAT 11

RESULT 177

ADR46853
 ID ADR46853 standard; cDNA; 12 BP.

XX ADR46853;

XX 18-NOV-2004 (first entry)

XX Mouse cystin (Cys1) nucleotide fragment SEQ ID NO:4.

XX autosomal recessive polycystic kidney disease; ARPKD; cystin; cpk;
 KW nephrotropic; gene therapy; mouse; gene; ss.

XX Mus musculus.

XX WO2004074302-A2.

XX 02-SEP-2004.

XX 18-FEB-2004; 2004WO-US004778.

XX 18-FEB-2003; 2003US-0448168P.

XX (UABR-) UAB RES FOUND.

XX Guay-Woodford L;

XX WPI; 2004-635536/61.

XX New autosomal recessive polycystic kidney disease (ARPKD) nucleic acid
 PT molecules and polypeptides useful for diagnosing, preventing or treating
 PT ARPKD.

XX Claim 11; SEQ ID NO 4; 58pp; English.

XX The present invention describes an isolated and purified nucleic acid
 CC molecule comprising a sequence which codes for a wild-type or mutant
 CC autosomal recessive polycystic kidney disease (ARPKD) nucleic acid. Also
 CC described: (1) a purified polypeptide comprising the 145, 158 or 165
 CC amino acid sequences of SEQ ID NOS:3, 9 and 10, (ADR46852, ADR46858 and
 CC ADR46859) respectively; (2) an expression vector comprising a nucleic
 CC acid coding for a wild-type or mutant ARPKD nucleic acid operably linked
 CC to an expression control sequence; (3) a non-human cell comprising the
 CC above expression vector; and (4) producing a polypeptide by culturing the
 CC cells comprising the expression vector. The protein and gene associated
 CC with ARPKD is cystin (Cys1), previously referred to as cpk). Cys1 has
 CC nephrotropic activity, and can be used in gene therapy. The Cys1 nucleic
 CC acids and polypeptides are useful in the diagnosis of ARPKD. The nucleic
 CC acids may be useful in gene therapy, and antisense oligonucleotides based
 CC on the sequences may also be useful in treating ARPKD. Analysis of mouse
 CC and human Cys1 transcripts may be used to identify compounds that
 CC modulate the expression of the wild type or mutant genes. The present
 CC sequence represents a mouse Cys1 nucleotide fragment, which is deleted in
 CC a mutant Cys1 nucleotide sequence, and is given in the exemplification of
 CC the present invention.

SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCGCGGGCGGC 11
 | | | | |
 Db 2 CGGAGGGCGGC 12

RESULT 178

ADW86980
 ID ADW86980 standard; DNA; 12 BP.

XX ADW86980;

```

XX DT 07-APR-2005 (first entry)
XX DE Protein labelling method sequence #182.
XX KW DNA purification; protein engineering; diagnosis; ss.
XX OS Unidentified.
XX PN WO2004113530-A1.
XX PD 29-DEC-2004.
XX PF 18-JUN-2004; 2004WO-JP008953.
XX PR 18-JUN-2003; 2003JP-00173634.
XX PA (MITU ) MITSUBISHI CHEM CORP.
XX PI Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
XX PI Hashimoto H, Sasaki T;
XX DR WPI; 2005-075248/08.
XX XX
XX PT Novel polynucleotide having ability to increase labeling efficiency of
XX PT labeling compound, useful for synthesizing labeled protein in presence of
XX PT labeling compound.
XX PS Disclosure; Fig 20; 140pp; Japanese.
XX CC The invention relates to a polynucleotide (I) for synthesizing labeled
XX CC protein and having ability to increase labeling efficiency of labeling
XX CC compound, where protein is produced by adding labeling compound to 3'
XX CC terminal of sequence encoding target protein of gene template, where
XX CC labeling compound has label portion and acceptor portion having compound
XX CC capable of binding to C-terminus of label portion and translating gene
XX CC template in presence of labeled compound. (I) is useful for producing a
XX CC labeling protein, which involves preparing a gene template by adding (I)
XX CC to the 3'-terminal of base sequence encoding the target protein,
XX CC translating the gene template in the presence of the labeling compound
XX CC containing acceptor portion and label portion, and obtaining protein
XX CC synthesized in the translation system. The base sequence encoding the
XX CC target protein either contains the termination codon or does not contain
XX CC the termination codon. The labeling compound is added after the
XX CC initiation of the translation. The labeled protein (IPI) is useful in a
XX CC performance-analysis of a protein, which involves contacting the test
XX CC substance with (IPI), and analyzing the interaction between the protein
XX CC and the test substance. (I) has the ability to increase labeling
XX CC efficiency of a labeling compound and thus effectively produces labeled
XX CC protein. This sequence corresponds to a sequence used in the method of
XX CC the invention.
XX SQ Sequence 12 BP; 0 A; 3 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGGGGGGCGGC 11
DB 1 CGGGGGGGCGGC 11

RESULT 179
ADW86848
ID ADW86848 standard; DNA; 12 BP.
XX AC
XX ADW86848;
XX DT 07-APR-2005 (first entry)
XX DE Protein labelling method sequence #50.
XX XX

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KW KW DNA purification; protein engineering; diagnosis; ss.
XX OS Unidentified.
XX PN WO2004113530-A1.
XX PD 29-DEC-2004.
XX PF 18-JUN-2004; 2004WO-JP008953.
XX PR 18-JUN-2003; 2003JP-00173634.
XX PA (MITU ) MITSUBISHI CHEM CORP.
XX XX
XX PI Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
XX PI Hashimoto H, Sasaki T;
XX DR WPI; 2005-075248/08.
XX XX
XX PT Novel polynucleotide having ability to increase labeling efficiency of
XX PT labeling compound, useful for synthesizing labeled protein in presence of
XX PT labeling compound.
XX PS Disclosure; Fig 9; 140pp; Japanese.
XX CC The invention relates to a polynucleotide (I) for synthesizing labeled
XX CC protein and having ability to increase labeling efficiency of labeling
XX CC compound, where protein is produced by adding labeling compound to 3'
XX CC terminal of sequence encoding target protein of gene template, where
XX CC labeling compound has label portion and acceptor portion having compound
XX CC capable of binding to C-terminus of label portion and translating gene
XX CC template in presence of labeled compound. (I) is useful for producing a
XX CC labeling protein, which involves preparing a gene template by adding (I)
XX CC to the 3'-terminal of base sequence encoding the target protein,
XX CC translating the gene template in the presence of the labeling compound
XX CC containing acceptor portion and label portion, and obtaining protein
XX CC synthesized in the translation system. The base sequence encoding the
XX CC target protein either contains the termination codon or does not contain
XX CC the termination codon. The labeling compound is added after the
XX CC initiation of the translation. The labeled protein (IPI) is useful in a
XX CC performance-analysis of a protein, which involves contacting the test
XX CC substance with (IPI), and analyzing the interaction between the protein
XX CC and the test substance. (I) has the ability to increase labeling
XX CC efficiency of a labeling compound and thus effectively produces labeled
XX CC protein. This sequence corresponds to a sequence used in the method of
XX CC the invention.
XX SQ Sequence 12 BP; 0 A; 3 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGGGGGGCGGC 11
DB 1 CGGGGGGGCGGC 11

RESULT 180
ADW87042
ID ADW87042 standard; DNA; 12 BP.
XX AC
XX ADW87042;
XX DT 07-APR-2005 (first entry)
XX DE Protein labelling method sequence #244.
XX KW DNA purification; protein engineering; diagnosis; ss.
XX OS Unidentified.
XX PN WO2004113530-A1.

```


PI Hashimoto H, Sasaki T;
 XX DR WPI; 2005-075248/08.
 XX
 PT Novel polynucleotide having ability to increase labeling efficiency of
 PT labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.
 XX

PS Disclosure; Fig 20; 140pp; Japanese.

XX
 CC The invention relates to a polynucleotide (I) for synthesizing labeled
 CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound
 CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling protein, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein,
 CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a
 CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.

XX Sequence 12 BP; 0 A; 3 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGGC 11
 ||| |||||
 Db 1 CGGGGGCGGC 11

RESULT 183

ID ADW86870
 AC ADW86870 standard; DNA; 12 BP.

XX
 AC ADW86870;

XX 07-APR-2005 (first entry)

XX Protein labelling method sequence #72.

XX DNA purification; protein engineering; diagnosis; ss.

XX Unidentified.

XX WO2004113530-A1.

XX 29-DEC-2004.

XX 18-JUN-2004; 2004WO-JP008953.

XX 18-JUN-2003; 2003JP-00173634.

XX (MITU) MITSUBISHI CHEM CORP.

XX Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;

PI Hashimoto H, Sasaki T;

XX WPI; 2005-075248/08.

XX Novel polynucleotide having ability to increase labeling efficiency of

PT labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.

PS Disclosure; Fig 10; 140pp; Japanese.

XX
 CC The invention relates to a polynucleotide (I) for synthesizing labeled
 CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound
 CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling protein, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein,
 CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a
 CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.

SQ Sequence 12 BP; 0 A; 3 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGGC 11
 ||| |||||
 Db 1 CGGGGGCGGC 11

RESULT 184

ID ADW86922
 AC ADW86922 standard; DNA; 12 BP.

XX
 AC ADW86922;

XX 07-APR-2005 (first entry)

XX Protein labelling method sequence #124.

XX DNA purification; protein engineering; diagnosis; ss.

XX Unidentified.

XX WO2004113530-A1.

XX 29-DEC-2004.

XX 18-JUN-2004; 2004WO-JP008953.

XX 18-JUN-2003; 2003JP-00173634.

XX (MITU) MITSUBISHI CHEM CORP.

XX Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;

PI Hashimoto H, Sasaki T;

XX WPI; 2005-075248/08.

XX Novel polynucleotide having ability to increase labeling efficiency of
 PT labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.

PS Disclosure; Fig 20; 140pp; Japanese.

CC The invention relates to a polynucleotide (I) for synthesizing labeled
 CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound
 CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling protein, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein,
 CC translating the gene template in the presence of the labeling compound
 CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a
 CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.
 XX
 SQ Sequence 12 BP; 0 A; 3 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. NO. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGCGGGCGGC 11
 DB 1 CGCGGGCGGC 11
 RESULT 185
 ADW86926
 ID ADW86926 standard; DNA; 12 BP.
 XX
 AC ADW86926;
 DT 07-APR-2005 (first entry)
 XX Protein labelling method sequence #128.
 DE
 XX DNA purification; protein engineering; diagnosis; ss.
 KW Unidentified.
 OS
 XX WO2004113530-A1.
 PN 29-DEC-2004.
 PD
 XX 18-JUN-2004; 2004WO-JP008953.
 XX 18-JUN-2003; 2003JP-00173634.
 XX (MITU) MITSUBISHI CHEM CORP.
 PA
 XX Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
 PI Hashimoto H, Sasaki T;
 XX WPI; 2005-075248/08.
 XX Novel polynucleotide having ability to increase labeling efficiency of
 PT labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.
 XX
 PS Disclosure; Fig 20; 140pp; Japanese.
 XX The invention relates to a polynucleotide (I) for synthesizing labeled
 CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound

CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling protein, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein,
 CC translating the gene template in the presence of the labeling compound
 CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a
 CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.
 XX
 SQ Sequence 12 BP; 0 A; 3 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. NO. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGCGGGCGGC 11
 DB 1 CGCGGGCGGC 11
 RESULT 186
 ADW86874
 ID ADW86874 standard; DNA; 12 BP.
 XX
 AC ADW86874;
 DT 07-APR-2005 (first entry)
 XX Protein labelling method sequence #76.
 DE
 XX DNA purification; protein engineering; diagnosis; ss.
 KW Unidentified.
 OS
 XX WO2004113530-A1.
 PN 29-DEC-2004.
 PD
 XX 18-JUN-2004; 2004WO-JP008953.
 XX 18-JUN-2003; 2003JP-00173634.
 XX (MITU) MITSUBISHI CHEM CORP.
 PA
 XX Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
 PI Hashimoto H, Sasaki T;
 XX WPI; 2005-075248/08.
 XX Novel polynucleotide having ability to increase labeling efficiency of
 PT labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.
 XX
 PS Disclosure; Fig 19; 140pp; Japanese.
 XX The invention relates to a polynucleotide (I) for synthesizing labeled
 CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound
 CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling protein, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein,
 CC translating the gene template in the presence of the labeling compound

CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a
 CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.
 XX
 SQ Sequence 12 BP; 0 A; 3 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGGCGGGCGGC 11
 DB 1 CGGCGGGCGGC 11
 RESULT 187
 ADW86985
 ID ADW86985 standard; DNA; 12 BP.
 AC
 XX
 AC ADW86985;
 DT 07-APR-2005 (first entry)
 XX
 DE Protein labelling method sequence #187.
 XX
 KW DNA purification; protein engineering; diagnosis; ss.
 XX
 OS Unidentified.
 XX
 PN WO2004113530-A1.
 XX
 PD 29-DEC-2004.
 XX
 XX 18-JUN-2004; 2004WO-JP008953.
 XX
 PR 18-JUN-2003; 2003JP-00173634.
 XX
 PA (MITU) MITSUBISHI CHEM CORP.
 XX
 PI Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
 PI Hashimoto H, Sasaki T;
 XX
 DR WPI; 2005-075248/08.
 XX
 XX Novel polynucleotide having ability to increase labeling efficiency of
 PT labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.
 XX
 PS Disclosure; Fig 20; 140pp; Japanese.
 XX
 XX The invention relates to a polynucleotide (I) for synthesizing labeled
 CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound
 CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling protein, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein,
 CC translating the gene template in the presence of the labeling compound
 CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a

CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.
 XX
 SQ Sequence 12 BP; 0 A; 3 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGGCGGGCGGC 11
 DB 1 CGGCGGGCGGC 11
 RESULT 188
 ADW87340/C
 ID ADW87340 standard; DNA; 12 BP.
 AC
 XX
 AC ADW87340;
 DT 21-APR-2005 (first entry)
 XX
 DE Dog Lafora body disease associated protein EPM2B D repeat.
 XX
 KW ds; diagnosis; Lafora body disease; genetic disorder; EPM2B.
 XX
 OS Canis familiaris.
 XX
 PN WO2005012526-A1.
 XX
 PD 10-FEB-2005.
 XX
 PF 30-JUL-2004; 2004WO-CA001449.
 XX
 PR 04-AUG-2003; 2003US-0491968P.
 XX
 XX (HOSP-) HOSPITAL FOR SICK CHILDREN.
 XX
 PI Scherer SW, Minassian BA;
 XX
 DR WPI; 2005-142895/15.
 XX
 XX New nucleic acid molecule encoding EPM2B or a protein with a RING-finger
 PT domain and 6 NHL-motifs, useful for diagnosing and treating Lafora's
 PT disease.
 XX
 PS Claim 27; SEQ ID NO 5; 96pp; English.
 XX
 XX The invention relates to an isolated nucleic acid molecule encoding a
 CC protein with a RING-finger domain and 6 NHL-motifs, where the protein is
 CC associated with Lafora's disease. The sequences, composition, kits, and
 CC methods are useful for diagnosing and treating Lafora's disease. The
 CC present sequence represents the D repeat present in the dog Lafora body
 CC disease associated protein EPM2B DNA.
 XX
 SQ Sequence 12 BP; 0 A; 9 C; 3 G; 0 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 1.3e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGGCGGGCGGC 11
 DB 11 CGGCGGGCGGC 1
 RESULT 189
 AAV47290
 ID AAV47290 standard; DNA; 13 BP.

```

XX AAV47290;
AC
XX
XX 10-NOV-1998 (first entry)
DT
XX
XX Antisense oligonucleotide 790, targeting adenosine A1 receptor.
DE
XX
XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..13
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide
FT linkages"
XX
XX WO9823294-A1.
PN
XX
XX 04-JUN-1998.
PD
XX
XX 26-NOV-1997; 97WO-US022017.
PF
XX
XX 26-NOV-1996; 96US-00757024.
PR
XX
XX (UYEC-) UNIV EAST CAROLINA.
PA
XX
XX Nyce JW;
PI
XX
XX WPI; 1998-322464/28.
DR
XX
XX Treating respiratory disease with antisense sequences directed against
PT adenosine or bradykinin receptors - with localised delivery to the
PT respiratory system, suitable for long term treatment of asthma, adult
PT respiratory distress syndrome etc.
XX
XX Claim 12; Page 8-24; 47pp; English.
PS
XX
XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
CC human adenosine A1 receptor, the design of which required the secondary
CC structure of this targets mRNA. The adenosine receptor mRNA secondary
CC structure was both analysed and used to construct antisense
CC oligonucleotides containing a phosphorothioate backbone. Once the
CC antisense molecules are created they can be used to target their
CC predetermined target, thus causing the gene product to decrease. The
CC antisense oligonucleotides were targeted to specific mRNA regions
CC containing either a junction between the intron and exon, or where they
CC may overlap the initiation codon. The receptor is a member of the G-
CC protein coupled family of cell surface receptors that have 7-
CC transmembrane segments. These oligonucleotides can be used to treat or
CC prevent conditions associated with bronchoconstriction and/or lung
CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
CC allergy, emphysema and cystic fibrosis
XX
XX Sequence 13 BP; 1 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
SQ
Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 1 GGGCGGCATGG 11

RESULT 190
AAV47272
ID AAV47272 standard; DNA; 13 BP.
XX
XX AAV47272;
AC

```

```

XX 10-NOV-1998 (first entry)
DT
XX
XX Antisense oligonucleotide 772, targeting adenosine A1 receptor.
DE
XX
XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..13
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide
FT linkages"
XX
XX WO9823294-A1.
PN
XX
XX 04-JUN-1998.
PD
XX
XX 26-NOV-1997; 97WO-US022017.
PF
XX
XX 26-NOV-1996; 96US-00757024.
PR
XX
XX (UYEC-) UNIV EAST CAROLINA.
PA
XX
XX Nyce JW;
PI
XX
XX WPI; 1998-322464/28.
DR
XX
XX Treating respiratory disease with antisense sequences directed against
PT adenosine or bradykinin receptors - with localised delivery to the
PT respiratory system, suitable for long term treatment of asthma, adult
PT respiratory distress syndrome etc.
XX
XX Claim 12; Page 8-24; 47pp; English.
PS
XX
XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
CC human adenosine A1 receptor, the design of which required the secondary
CC structure of this targets mRNA. The adenosine receptor mRNA secondary
CC structure was both analysed and used to construct antisense
CC oligonucleotides containing a phosphorothioate backbone. Once the
CC antisense molecules are created they can be used to target their
CC predetermined target, thus causing the gene product to decrease. The
CC antisense oligonucleotides were targeted to specific mRNA regions
CC containing either a junction between the intron and exon, or where they
CC may overlap the initiation codon. The receptor is a member of the G-
CC protein coupled family of cell surface receptors that have 7-
CC transmembrane segments. These oligonucleotides can be used to treat or
CC prevent conditions associated with bronchoconstriction and/or lung
CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
CC allergy, emphysema and cystic fibrosis
XX
XX Sequence 13 BP; 2 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 2 GGGCGGCATGG 12

RESULT 191
AAV47190
ID AAV47190 standard; DNA; 13 BP.
XX
XX AAV47190;
AC
XX
XX 10-NOV-1998 (first entry)
DT

```


XX DE Antisense oligonucleotide 690, targeting adenosine A1 receptor.
 XX KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX OS Synthetic.
 OS Homo sapiens.
 XX FH Key Location/Qualifiers
 FT modified_base 1..13
 FT /*tag= a
 FT /note="contains phosphorothioate internucleotide
 FT linkages"
 XX PN WO9823294-A1.
 XX PD 04-JUN-1998.
 XX XX
 XX PF 26-NOV-1997; 97WO-US022017.
 XX XX
 XX PR 26-NOV-1996; 96US-00757024.
 XX XX
 XX PA (UYEC-) UNIV EAST CAROLINA.
 XX XX
 XX PI Nyce JW;
 XX XX
 XX DR WPI; 1998-322464/28.
 XX XX
 XX PT Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX XX
 XX PS Claim 12; Page 8-24; 47pp; English.
 XX XX
 CC Sequences AAV46501-V4746 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX XX
 SQ Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGCA 12
 || |||||
 DB 3 GGAGGCGGCGCA 13
 RESULT 192
 AAX53649
 ID AAX53649 standard; DNA; 13 BP.
 XX XX
 AC AAX53649;
 XX XX
 DT 05-JUL-1999 (first entry)
 XX XX
 DE Human adenosine A1 receptor antisense oligonucleotide fragment.

XX KW Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; pain; cystic fibrosis;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX KW Synthetic.
 OS XX
 OS WO9913886-A1.
 XX PN
 XX XX
 XX PD 25-MAR-1999.
 XX XX
 XX PF 17-SEP-1998; 98WO-US019419.
 XX XX
 XX PR 17-SEP-1997; 97US-0059160P.
 XX PR 09-JUN-1998; 98US-00093972.
 XX XX
 XX PA (UYEC-) UNIV EAST CAROLINA.
 XX XX
 XX PI Nyce JW;
 XX XX
 XX DR WPI; 1999-229400/19.
 XX XX
 XX PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX XX
 XX PS Disclosure; Page 39; 120pp; English.
 XX XX
 CC . The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX5272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer, as
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX XX
 SQ Sequence 13 BP; 2 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5 GGGCGGCGATCG 15
 |||||
 DB 2 GGGCGGCGATGG 12
 RESULT 193
 AAX53667
 ID AAX53667 standard; DNA; 13 BP.
 XX XX
 AC AAX53667;
 XX XX
 DT 05-JUL-1999 (first entry)

```

XX DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX KW prostate cancer; ss.
XX OS Synthetic.
XX PN WO9913886-A1.
XX PD 25-MAR-1999.
XX PF 17-SEP-1998; 98WO-US019419.
XX PR 17-SEP-1997; 97US-0059160P.
XX PR 09-JUN-1998; 98US-00093972.
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX DR WPI; 1999-229400/19.
XX PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX vasoconstriction.
XX PS Disclosure; Page 39; 120pp; English.
XX CC The specification describes antisense oligonucleotides (AA52869-X55271)
XX directed against at least 2 mRNAs selected from target genes, coding and
XX non-coding regions of RNAs corresponding to target genes, gene initiation
XX codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX end and the juxta-section between coding and non-coding regions and all
XX segments of RNAs encoding proteins associated with one or more diseases,
XX conditions or mixtures. The antisense oligonucleotides may be derived
XX from sequences AA5272-74. These multiple target oligonucleotides
XX (specifically AA55180-271) can be used for the antisense treatment of
XX diseases and conditions. Typical diseases and conditions are those
XX associated with impaired respiration and inflammation, including lung
XX diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX acute asthma, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
XX disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
XX colon cancer, breast cancer, lung cancer, pancreatic cancer,
XX hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
XX well as all types of cancers which may metastasize or have metastasized
XX to the lungs, including breast and prostate cancer
XX SQ Sequence 13 BP; 1 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5 GGGCGGCATCG 15
Db 1 GGGCGGCATGG 11
RESULT 194
AA53567
ID AAX53567 standard; DNA; 13 BP.
XX AAX53567;

```

```

XX DT 05-JUL-1999 (first entry)
XX DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX KW prostate cancer; ss.
XX OS Synthetic.
XX PN WO9913886-A1.
XX PD 25-MAR-1999.
XX PF 17-SEP-1998; 98WO-US019419.
XX PR 17-SEP-1997; 97US-0059160P.
XX PR 09-JUN-1998; 98US-00093972.
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI Nyce JW;
XX DR WPI; 1999-229400/19.
XX PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX vasoconstriction.
XX PS Disclosure; Page 38; 120pp; English.
XX CC The specification describes antisense oligonucleotides (AA52869-X55271)
XX directed against at least 2 mRNAs selected from target genes, coding and
XX non-coding regions of RNAs corresponding to target genes, gene initiation
XX codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
XX end and the juxta-section between coding and non-coding regions and all
XX segments of RNAs encoding proteins associated with one or more diseases,
XX conditions or mixtures. The antisense oligonucleotides may be derived
XX from sequences AA55180-271. These multiple target oligonucleotides
XX (specifically AA55180-271) can be used for the antisense treatment of
XX diseases and conditions. Typical diseases and conditions are those
XX associated with impaired respiration and inflammation, including lung
XX diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
XX acute asthma, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
XX pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
XX disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
XX colon cancer, breast cancer, lung cancer, pancreatic cancer,
XX hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
XX well as all types of cancers which may metastasize or have metastasized
XX to the lungs, including breast and prostate cancer
XX SQ Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGGCGGCGGCA 12
Db 3 GGAGGGCGGCA 13
RESULT 195
AAA33092
ID AAA33092 standard; DNA; 13 BP.

```

XX AC AAA33092;
 XX DT 28-JUL-2000 (first entry)
 XX DE Low adenosine antisense oligonucleotide SEQ ID NO:781.
 XX KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 XX KW phosphothioate; impaired respiration; inflammation; allergy;
 XX KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 XX KW antiallergic; antiasthmatic; cytosstatic; analgesic; impaired airway;
 XX KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 XX KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 XX KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 XX KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX OS Homo sapiens.
 XX PN WO200009525-A2.
 XX PD 24-FEB-2000.
 XX PF 03-AUG-1999; 99WO-US017712.
 XX PR 03-AUG-1998; 98US-0095212P.
 XX PA (UYEC-) UNIV EAST CAROLINA.
 XX PI Nyce JW;
 XX PS WPI; 2000-205971/18.
 XX DT New antisense oligonucleotides useful for treating e.g. pulmonary
 XX PT vasoconstriction, inflammation, allergies, asthma, hypertension, or
 XX PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 XX PT cancers.
 XX PS Claim 18; Page 364; 1343pp; English.
 XX CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytosstatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX SQ Sequence 13 BP; 2 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5 GGGCGGCATCG 15
 |||||

Db 2 GGGCGGCATGG 12
 RESULT 196
 AAA33110
 ID AAA33110 standard; DNA; 13 BP.
 XX AC AAA33110;
 XX DT 28-JUL-2000 (first entry)
 XX DE Low adenosine antisense oligonucleotide SEQ ID NO:799.
 XX KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytosstatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX OS Homo sapiens.
 XX PN WO200009525-A2.
 XX PD 24-FEB-2000.
 XX PF 03-AUG-1999; 99WO-US017712.
 XX PR 03-AUG-1998; 98US-0095212P.
 XX PA (UYEC-) UNIV EAST CAROLINA.
 XX PI Nyce JW;
 XX PS WPI; 2000-205971/18.
 XX DT New antisense oligonucleotides useful for treating e.g. pulmonary
 XX PT vasoconstriction, inflammation, allergies, asthma, hypertension, or
 XX PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 XX PT cancers.
 XX PS Claim 18; Page 366; 1343pp; English.
 XX CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytosstatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX SQ Sequence 13 BP; 1 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGCGGCGCATCG 15
||| ||| ||| |||
Db 1 GGCGGCGCATGG 11

RESULT 197
AAA33010
ID AAA33010 standard; DNA; 13 BP.
XX
AC AAA33010;
XX
DT 28-JUL-2000 (first entry)
XX
DE Low adenosine antisense oligonucleotide SEQ ID NO:699.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US017712.
XX
PR 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension, or
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.
XX
PS Claim 18; Page 354; 1343pp; English.

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONs from the present invention. N.B.

CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGCGGCGCA 12
||| ||| ||| |||
Db 3 GGAGGCGGCGCA 13

RESULT 198
AAA03369
ID AAA03369 standard; DNA; 13 BP.
XX
AC AAA03369;
XX
DT 19-MAY-2000 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:653.
XX
KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
KW endotoxin release; ARDS; acute respiratory distress syndrome;
KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
KW chronic obstructive pulmonary disease; ss.
XX
OS Homo sapiens.
XX
PN WO9563938-A2.
XX
PD 16-DEC-1999.
XX
PF 08-JUN-1999; 99WO-US012775.
XX
PR 08-JUN-1998; 98US-0088501P.
XX
PR 09-JUN-1998; 98US-0003972.
XX
PR 09-JUN-1998; 98US-0088657P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Hill JL;
XX
DR WPI; 2000-116433/10.
XX
PT Novel composition for treating or preventing e.g. cardiopulmonary and
PT renal injury.
XX
PS Claim 17; Page 33; 252pp; English.

The present invention describes a pharmaceutical composition, comprising at least one agent (I) that prevents, alleviates and/or inhibits adenosine-mediated cardiopulmonary and/or renal damage and/or failure. (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide (Ib), containing less than 15% adenosine (A), that is antisense to target genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3' ends or segments between coding and non-coding sequences), or to all segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and has A1, A2b or A3 agonist activity or A2a antagonist activity (or at least no agonist activity at this receptor). (I) may be a mixture of (Ia) and (Ib), and optionally also contains one or more surfactants. The compositions are used to prevent, alleviate and/or treat adenosine receptor-mediated cardiac, lung and/or renal damage or failure (particularly where associated with ischaemia, toxin release and/or administration of drugs or imaging agents, e.g. adenosine for treating supraventricular tachycardia); (adult) respiratory distress syndrome

CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGCA 12
 ||| |||||
 Db 3 GGGGGCGGCA 13

RESULT 199

AAA03469

ID AAA03469 standard; DNA; 13 BP.

XX AAA03469;

19-MAY-2000 (first entry)

Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:753.

Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 endotoxin release; ARDS; acute respiratory distress syndrome;
 cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 supraventricular tachycardia; allergic rhinitis; acute inflammation;
 chronic obstructive pulmonary disease; ss.

Homo sapiens.

Synthetic.

WO9963938-A2.

16-DEC-1999.

08-JUN-1999; 99WO-US012775.

08-JUN-1998; 98US-0088501P.

09-JUN-1998; 98US-00093972.

09-JUN-1998; 98US-0088657P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Hill JL;

WPI; 2000-116433/10.

Novel composition for treating or preventing e.g. cardiopulmonary and renal injury.

Claim 17; Page 35; 252pp; English.

The present invention describes a pharmaceutical composition, comprising at least one agent (I) that prevents, alleviates and/or inhibits adenosine-mediated cardiopulmonary and/or renal damage and/or failure. (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide (Ib), containing less than 15% adenosine (A), that is antisense to target genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3' ends or segments between coding and non-coding sequences), or to all segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and has A1, A2b or A3 agonist activity or A2a antagonist activity (or at least no agonist activity at this receptor). (I) may be a mixture of (Ia)

and (Ib), and optionally also contains one or more surfactants. The compositions are used to prevent, alleviate and/or treat adenosine receptor-mediated cardiac, lung and/or renal damage or failure (particularly where associated with ischaemia, toxin release and/or administration of drugs or imaging agents, e.g. adenosine for treating supraventricular tachycardia); (adult) respiratory distress syndrome (e.g. associated with sepsis); allergic rhinitis; chronic obstructive pulmonary disease; cardiopulmonary hypoxia associated with administration of stress-test agents, particularly where such conditions are associated with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to AAA03715 represent specifically claimed phosphorothioate antisense oligonucleotides for use in the composition of the present invention. AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other phosphorothioate oligonucleotides used in the exemplification of the present invention

Sequence 13 BP; 1 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 13;

Best Local Similarity 90.9%; Pred. No. 1.4e+02;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GCGGGCATCG 15

|||||||
 Db 1 GCGGGCATCG 11

RESULT 200

AAA03451

ID AAA03451 standard; DNA; 13 BP.

XX AAA03451;

AC AAA03451;

19-MAY-2000 (first entry)

Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:735.

Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 endotoxin release; ARDS; acute respiratory distress syndrome;
 cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 supraventricular tachycardia; allergic rhinitis; acute inflammation;
 chronic obstructive pulmonary disease; ss.

Homo sapiens.

Synthetic.

WO9963938-A2.

16-DEC-1999.

08-JUN-1999; 99WO-US012775.

08-JUN-1998; 98US-0088501P.

09-JUN-1998; 98US-00093972.

09-JUN-1998; 98US-0088657P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Hill JL;

WPI; 2000-116433/10.

Novel composition for treating or preventing e.g. cardiopulmonary and renal injury.

Claim 17; Page 34; 252pp; English.

The present invention describes a pharmaceutical composition, comprising at least one agent (I) that prevents, alleviates and/or inhibits adenosine-mediated cardiopulmonary and/or renal damage and/or failure. (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide

CC (1b), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (1b), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 13 BP; 2 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5 GGGCGGCATCG 15
 Db 2 GGGCGGCATGG 12
 |||||
 |||||
 RESULT 201
 AAFF19232
 ID AAFF19232 standard; DNA; 13 BP.
 AC AAFF19232;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #799.
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2000062736-A2.
 XX
 XX 26-OCT-2000.
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 XX
 XX 06-APR-1999; 99US-0127958P.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 XX (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 XX
 XX WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 XX adenosine receptors during metabolism, useful e.g. for treating cancers
 PT

PT and respiratory obstructions.
 XX
 XX Claim 14; Page 118; 1592pp; English.
 XX
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAFF18434 to AAFF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 13 BP; 1 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 58.7%; Score 9.4; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5 GGGCGGCATCG 15
 Db 1 GGGCGGCATGG 11
 |||||
 |||||
 RESULT 202
 AAFF19132
 ID AAFF19132 standard; DNA; 13 BP.
 XX
 AC AAFF19132;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #699.
 XX
 XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2000062736-A2.
 XX
 XX 26-OCT-2000.
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 XX

XX 06-APR-1999; 99US-0127958P.
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX Nyce JW;
 XX WPI; 2000-679539/66.
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX Claim 14; Page 116; 1592pp; English.
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, adhesion molecules and their receptors, cytokine and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 SQ Query Match 58.7%; Score 9.4; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGGCA 12
 ||| |||||
 DB 3 GGAGGGCGGCA 13
 RESULT 203
 AAF19214
 ID AAF19214 standard; DNA; 13 BP.
 XX AAF19214;
 AC AAF19214;
 XX 14-MAR-2001 (first entry)
 DT Human adenosine A1 receptor polynucleotide fragment #781.
 DE Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 XX human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;

KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 XX cancer; ss.
 OS Homo sapiens.
 XX WO200062736-A2.
 PN 26-OCT-2000.
 PD 24-MAR-2000; 2000WO-US008020.
 PF 06-APR-1999; 99US-0127958P.
 PR (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX Nyce JW;
 XX WPI; 2000-679539/66.
 DR Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX Claim 14; Page 118; 1592pp; English.
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, adhesion molecules and their receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

SQ Sequence 13 BP; 2 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 13;
 Best Local Similarity 90.9%; Pred. No. 1.4e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GCGGGCGGCA 15
 |||||
 DB 2 GCGGGCGGCA 12

RESULT 204
 ABH27202
 ID ABH27202 standard; DNA; 13 BP.
 XX

```

AC ABH27202;
XX
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 227179 for detecting SNP TSC0006410.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 227179; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
SQ
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGGCGGCAT 13
Db 2 GCGGGCGGTAT 12
|||||
RESULT 205
ABH27203/C
ID ABH27203 standard; DNA; 13 BP.
XX
XX ABH27203;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 227180 for detecting SNP TSC0006410.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX

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XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 227180; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 6 C; 2 G; 1 T; 0 U; 0 Other;
SQ
XX Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGGCGGCAT 13
Db 12 GCGGGCGGTAT 2
|||||
RESULT 206
ABZ94826
ID ABZ94826 standard; DNA; 13 BP.
XX
XX ABZ94826;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human adenosine A1 receptor antisense fragment no.689.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
PI

```


PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquitinone.
XX
PS Disclosure; SEQ ID NO 10150; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGGCGGCATCG 15
Db 2 GGGCGGCATCG 12
||| ||||| ||

RESULT 209
ABD18674
ID ABD18674 standard; DNA; 13 BP.
XX
AC ABD18674;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human adenosine A1 receptor oligonucleotide fragment 689.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
XX Homo sapiens.
OS
XX WO200285309-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013143.
PF
XX 24-APR-2001; 2001US-0286036P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide contained less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 10068; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGGCGGCGGCA 12
Db 3 GGAGGCGGCGCA 13
||| ||||| ||

RESULT 210
ABD18756
ID ABD18756 standard; DNA; 13 BP.
XX
AC ABD18756;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human adenosine A1 receptor oligonucleotide fragment 771.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.

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XX OS Homo sapiens.
XX PN WO200285309-A2.
XX PD 31-OCT-2002.
XX PF 23-APR-2002; 2002WO-US013143.
XX PR 24-APR-2001; 2001US-0286036P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-093058/08.
XX PT Pharmaceutical composition for treating asthma, has antisense
XX PT oligonucleotide containing less percentage of adenosine, targeted to
XX PT nucleic acids associated with lung airway or lung dysfunction, and
XX PT bronchodilating agent.
XX PS Claim 15; SEQ ID NO 10150; 763pp; English.
XX CC This invention describes a novel composition (a) a first active agent,
XX CC comprising oligonucleotides, effective for alleviating
XX CC bronchoconstriction, respiratory tract inflammation, allergies and
XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX CC surfactant depletion or hyposecretion, when administered to a mammal. The
XX CC oligonucleotides are derived from a gene encoding or regulating
XX CC expression of a target polypeptide associated with lung airway or lung
XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX CC The invention also describes a kit, that comprises: (a) a delivery
XX CC device, in separate containers, (b) the oligonucleotides, (c)
XX CC instructions for adding a carrier and for use of the kit. The composition
XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX CC beta-adrenergic agonist. The composition is useful for preventing or
XX CC treating a respiratory, lung or malignant disease. The administered
XX CC composition comprises oligo and is administered to reduce the production
XX CC or availability, or to increase the degradation of the target mRNA or to
XX CC reduce the amount of target polypeptide present in the lungs. The
XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung
XX CC inflammation, allergies and/or surfactant hypoproduction are associated
XX CC with a disease or condition such as pulmonary vasoconstriction,
XX CC inflammation, allergies, asthma, impeded respiration, respiratory
XX CC distress syndrome, emphysema, chronic obstructive pulmonary disease, pulmonary
XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.
XX CC The reduced adenosine content of the anti-sense oligos corresponding to
XX CC thymidines present in the target RNA serves to prevent the breakdown of
XX CC the oligonucleotides into products that free adenosine into the system
XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX CC prevent any unwanted effects due to it
XX SQ Sequence 13 BP; 2 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGCGCGCATCG 15
Db 2 GGCGCGCATGG 12
|||||||
|||||||

RESULT 211
ABD18774
ID ABD18774 standard; DNA; 13 BP.
XX AC ABD18774;
XX XX

```

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DT 29-JUL-2004 (first entry)
XX Human adenosine A1 receptor oligonucleotide fragment 789.
XX KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX KW pulmonary transplantation rejection; da.
XX OS Homo sapiens.
XX XX WO200285309-A2.
XX PN 31-OCT-2002.
XX PD 23-APR-2002; 2002WO-US013143.
XX PF 24-APR-2001; 2001US-0286036P.
XX PR (EPIG-) EPIGENESIS PHARM INC.
XX PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-093058/08.
XX PT Pharmaceutical composition for treating asthma, has antisense
XX PT oligonucleotide containing less percentage of adenosine, targeted to
XX PT nucleic acids associated with lung airway or lung dysfunction, and
XX PT bronchodilating agent.
XX PS Claim 15; SEQ ID NO 10168; 763pp; English.
XX CC This invention describes a novel composition (a) a first active agent,
XX CC comprising oligonucleotides, effective for alleviating
XX CC bronchoconstriction, respiratory tract inflammation, allergies and
XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX CC surfactant depletion or hyposecretion, when administered to a mammal. The
XX CC oligonucleotides are derived from a gene encoding or regulating
XX CC expression of a target polypeptide associated with lung airway or lung
XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX CC The invention also describes a kit, that comprises: (a) a delivery
XX CC device, in separate containers, (b) the oligonucleotides, (c)
XX CC instructions for adding a carrier and for use of the kit. The composition
XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX CC beta-adrenergic agonist. The composition is useful for preventing or
XX CC treating a respiratory, lung or malignant disease. The administered
XX CC composition comprises oligo and is administered to reduce the production
XX CC or availability, or to increase the degradation of the target mRNA or to
XX CC reduce the amount of target polypeptide present in the lungs. The
XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung
XX CC inflammation, allergies and/or surfactant hypoproduction are associated
XX CC with a disease or condition such as pulmonary vasoconstriction,
XX CC inflammation, allergies, asthma, impeded respiration, respiratory
XX CC distress syndrome, emphysema, chronic obstructive pulmonary disease, pulmonary
XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.
XX CC The reduced adenosine content of the anti-sense oligos corresponding to
XX CC thymidines present in the target RNA serves to prevent the breakdown of
XX CC the oligonucleotides into products that free adenosine into the system
XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX CC prevent any unwanted effects due to it
XX SQ Sequence 13 BP; 1 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 58.7%; Score 9.4; DB 1; Length 13;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 5 GGGCGGCATCG 15
 |||||
 Db 1 GGGCGGCATGG 11

RESULT 212

ADW86981

ID ADW86981 standard; DNA; 13 BP.

XX AC

XX AC

XX AC

XX 07-APR-2005 (first entry)

XX ADW86981;

XX Protein labelling method sequence #183.

XX DE

XX DNA purification; protein engineering; diagnosis; ss.

XX KW

XX Unidentified.

XX OS

XX PN WO2004113530-A1.

XX XX

XX 29-DEC-2004.

XX PD 18-JUN-2004; 2004WO-JP008953.

XX PF

XX 18-JUN-2003; 2003JP-00173634.

XX PR

XX (MITU) MITSUBISHI CHEM CORP.

XX PA

XX Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;

XX PI Hashimoto H, Sasaki T;

XX PI

XX WPI; 2005-075248/08.

XX DR

XX Novel polynucleotide having ability to increase labeling efficiency of

XX PT labeling compound, useful for synthesizing labeled protein in presence of

XX PT labeling compound.

XX PT

XX PS Disclosure; Fig 20; 140pp; Japanese.

XX XX

XX The invention relates to a polynucleotide (I) for synthesizing labeled

XX CC protein and having ability to increase labeling efficiency of labeling

XX CC compound, where protein is produced by adding labeling compound to 3'

XX CC terminal of sequence encoding target protein of gene template, where

XX CC labeling compound has label portion and acceptor portion having compound

XX CC capable of binding to C-terminus of label portion and translating gene

XX CC template in presence of labeled compound. (I) is useful for producing a

XX CC labeling protein, which involves preparing a gene template by adding (I)

XX CC to the 3'-terminal of base sequence encoding the target protein,

XX CC translating the gene template in the presence of the labeling compound

XX CC containing acceptor portion and label portion, and obtaining protein

XX CC synthesized in the translation system. The base sequence encoding the

XX CC target protein either contains the termination codon or does not contain

XX CC the termination codon. The labeling compound is added after the

XX CC initiation of the translation. The labeled protein (LPI) is useful in a

XX CC performance-analysis of a protein, which involves contacting the test

XX CC substance with (LPI), and analyzing the interaction between the protein

XX CC and the test substance. (II) has the ability to increase labeling

XX CC efficiency of a labeling compound and thus effectively produces labeled

XX CC protein. This sequence corresponds to a sequence used in the method of

XX CC the invention.

XX XX

XX Sequence 13 BP; 0 A; 4 C; 9 G; 0 T; 0 U; 0 Other;

XX SQ

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

RESULT 213

AAA34728

ID AAA34728 standard; DNA; 10 BP.

XX AC

XX AAA34728;

XX XX

XX 28-JUL-2000 (first entry)

XX DE

XX Human adenosine receptor related polynucleotide SEQ ID NO:2417.

XX XX

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;

XX KW phosphorothioate; impaired respiration; inflammation; allergy;

XX KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;

XX KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;

XX KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;

XX KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;

XX KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;

XX KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX XX

XX OS Homo sapiens.

XX XX

XX WO200009525-A2.

XX PN

XX 24-FEB-2000.

XX PD

XX 03-AUG-1999; 99WO-US017712.

XX PF

XX 03-AUG-1998; 98US-0095212P.

XX PR

XX (UYEC-) UNIV EAST CAROLINA.

XX PA

XX Nyce JW;

XX PI

XX WPI; 2000-205971/18.

XX DR

XX New antisense oligonucleotides useful for treating e.g. pulmonary

XX PT vasoconstriction, inflammation, allergies, asthma, hypertension,

XX PT bronchitis, emphysema, respiratory distress syndrome, ischemia or

XX PT cancers.

XX PT

XX PS Disclosure; Page 571; 1343pp; English.

XX XX

XX The present invention describes a new composition comprising an antisense

XX CC oligonucleotide (ON) with low adenosine (up to 15%), which targets

XX CC nucleic acids involved in bronchoconstriction, allergies, and/or

XX CC inflammation. The ON can have antiinflammatory, antiallergic,

XX CC antiasthmatic, cytostatic and analgesic activities. The compositions are

XX CC useful for the treatment of diseases associated with inflammation,

XX CC impaired airways, including lung disease and diseases whose secondary

XX CC effects afflict the lungs of a subject. They can be used for treating

XX CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,

XX CC impeded respiration, respiratory distress syndrome, pain, cystic

XX CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive

XX CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,

XX CC carcinomas, and cancers which may metastasise to the lungs, including

XX CC breast and prostate cancer. The reduction of the adenosine content of the

XX CC ONs reduces side effects. The A-containing ONs break down with the

XX CC release of deoxyadenosine which activates adenosine receptors causing

XX CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the

XX CC nucleotide sequences given in the sequence listing from the present

XX CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185

XX CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ

XX CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to

XX CC AAA33992) are specifically claimed ONs from the present invention. N.B.

XX CC Sequences given in the disclosure of the present invention do not match

XX CC up with their corresponding SEQ ID NO: sequences given in the sequence

XX CC listing

XX XX

XX Sequence 10 BP; 0 A; 2 C; 7 G; 0 T; 0 U; 1 Other;

XX SQ

XX

XX

XX

XX

XX

XX

XX

XX

XX

XX

Query Match

Best Local Similarity

57.5%; Score 9.2; DB 1; Length 10;

Pred. No. 1.1e+02;

Query Match

Best Local Similarity

57.5%; Score 9.2; DB 1; Length 10;

Pred. No. 1.1e+02;

Query Match

Best Local Similarity

58.7%; Score 9.4; DB 1; Length 13;

Pred. No. 1.4e+02;

Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGCGGC 11

|||

Db 2 CGGCGGCGGC 12

|||

Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
 ||:|||||
 Db 1 GGBGGCGGC 10

RESULT 214
 AAF20850
 ID AAF20850 standard; DNA; 10 BP.
 XX AC AAF20850;
 XX DT 14-MAR-2001 (first entry)
 XX DE Human adenosine A1 receptor polynucleotide fragment #2417.
 XX KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human, airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX OS Homo sapiens.
 XX PN WO200062736-A2.
 XX PD 26-OCT-2000.
 XX PF 24-MAR-2000; 2000WO-US008020.
 XX PR 06-APR-1999; 99US-0127958P.
 XX PA (UYEC-) UNIV EAST CAROLINA.
 XX PA (NYCE/) NYCE J W.
 XX PI Nyce JW;
 XX DR WPI; 2000-679539/66.
 XX PT Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX PS Claim 14; Page 106; 1592pp; English.
 XX CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,

CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX SQ Sequence 10 BP; 0 A; 2 C; 7 G; 0 T; 0 U; 1 Other;
 Query Match 57.5%; Score 9.2; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.1e+02;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
 ||:|||||
 Db 1 GGBGGCGGC 10

RESULT 215
 ABZ96544
 ID ABZ96544 standard; DNA; 10 BP.
 XX AC ABZ96544;
 XX DT 17-OCT-2003 (first entry)
 XX DE Human adenosine A1 receptor antisense fragment no.1662.
 XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; db.
 XX OS Homo sapiens.
 XX PN WO200285308-A2.
 XX PD 31-OCT-2002.
 XX PF 23-APR-2002; 2002WO-US013135.
 XX PR 24-APR-2001; 2001US-0286137P.
 XX PA (EPITG-) EPIGENESIS PHARM INC.
 XX PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI WPI; 2003-229219/22.
 XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX PS Disclosure; SEQ ID NO 11786; 872pp; English.
 XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 10 BP; 0 A; 2 C; 7 G; 0 T; 0 U; 1 Other;

Query Match 57.5%; Score 9.2; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.1e+02;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
 ||:|||||
 Db 1 GGGGGCGGC 10

RESULT 216

AAV47275
 ID AAV47275 standard; DNA; 10 BP.

XX AC AAV47275;

XX DT 10-NOV-1998 (first entry)

XX DE Antisense oligonucleotide 775, targeting adenosine A1 receptor.

XX KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.

OS Synthetic.
 OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified_base 1..10
 FT /tag= a
 FT /note= "contains phosphorothioate internucleotide linkages"

XX PN WO9823294-A1.

XX PD 04-JUN-1998.

XX PF 26-NOV-1997; 97WO-US022017.

XX PR 26-NOV-1996; 96US-00757024.

XX PA (UYEC-) UNIV EAST CAROLINA.

XX PI Nyce JW;

XX DR WPI; 1998-322464/28.

XX PT Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.

XX PS Claim 12; Page 8-24; 47pp; English.

XX CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-

CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis

SQ Sequence 10 BP; 2 A; 2 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
 |||:|||||

Db 2 GGGCGGCAT 10

RESULT 217

AAV47293

ID AAV47293 standard; DNA; 10 BP.

XX AC AAV47293;

XX DT 10-NOV-1998 (first entry)

XX DE Antisense oligonucleotide 793, targeting adenosine A1 receptor.

XX KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.

OS Synthetic.

OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified_base 1..10
 FT /tag= a
 FT /note= "contains phosphorothioate internucleotide linkages"

XX PN WO9823294-A1.

XX PD 04-JUN-1998.

XX PF 26-NOV-1997; 97WO-US022017.

XX PR 26-NOV-1996; 96US-00757024.

XX PA (UYEC-) UNIV EAST CAROLINA.

XX PI Nyce JW;

XX DR WPI; 1998-322464/28.

XX PT Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.

XX PS Claim 12; Page 8-24; 47pp; English.

XX CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or

CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 GGGCGGCAT 13
 |||||
 Db 1 GGGCGGCAT 9
 RESULT 218
 AAX53652
 ID AAX53652 standard; DNA; 10 BP.
 XX
 AC AAX53652;
 XX
 DT 05-JUL-1999 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide fragment.
 XX
 KW Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthetic.
 XX
 WO9913886-A1.
 XX
 XX 25-MAR-1999.
 XX
 PF 17-SEP-1998; 98WO-US019419.
 XX
 PR 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 WIPI; 1999-229400/19.
 XX
 DR New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX
 PS Disclosure; Page 39; 120pp; English.
 XX
 CC The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX5272-74. These multiple target oligonucleotides
 CC (specifically AAX5180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary

CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 GGGCGGCAT 13
 |||||
 Db 2 GGGCGGCAT 10
 RESULT 219
 AAX53670
 ID AAX53670 standard; DNA; 10 BP.
 XX
 AC AAX53670;
 XX
 DT 05-JUL-1999 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide fragment.
 XX
 KW Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthetic.
 XX
 WO9913886-A1.
 XX
 XX 25-MAR-1999.
 XX
 PF 17-SEP-1998; 98WO-US019419.
 XX
 PR 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 WIPI; 1999-229400/19.
 XX
 DR New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX
 PS Disclosure; Page 39; 120pp; English.
 XX
 CC The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX5272-74. These multiple target oligonucleotides
 CC (specifically AAX5180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary

CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 CC
 SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
 Db 1 GGGCGGCAT 9
 |||||

RESULT 220
 AAA33113
 ID AAA33113 standard; DNA; 10 BP.
 XX
 AC AAA33113;
 XX

DT 28-JUL-2000 (first entry)
 XX
 DE Low adenosine antisense oligonucleotide SEQ ID NO:802.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX

PF 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX

PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX

XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX

PS Claim 18; Page 366; 1343pp; English.
 XX

XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,

CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing the
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX

SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
 Db 1 GGGCGGCAT 9
 |||||

RESULT 221
 AAA33095
 ID AAA33095 standard; DNA; 10 BP.
 XX
 AC AAA33095;
 XX

DT 28-JUL-2000 (first entry)
 XX
 DE Low adenosine antisense oligonucleotide SEQ ID NO:784.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX

PF 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX

PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX

DR WPI; 2000-205971/18.
 XX
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX

PS Claim 18; Page 364; 1343pp; English.
 XX

XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,

CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONS reduces side effects. The A-containing ONS break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA3512 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONS from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 1.2e+02;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13

Db 2 GGGCGGCAT 10

|||||||

RESULT 222

AAA03472

ID AAA03472 standard; DNA; 10 BP.

AC AAA03472;

XX

DT 19-MAY-2000 (first entry)

XX

DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:756.

XX

KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

PN WO9963938-A2.

XX

PD 16-DEC-1999.

XX

PD 08-JUN-1999; 99WO-US012775.

XX

PR 08-JUN-1998; 98US-0088501P.

XX

PR 09-JUN-1998; 98US-00093972.

XX

PR 09-JUN-1998; 98US-0088657P.

XX

XX (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Hill JL;

XX

XX WPI; 2000-116433/10.

DR

PT Novel composition for treating or preventing e.g. cardiopulmonary and

XX renal injury.

XX Claim 17; Page 35; 252pp; English.

XX

CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administrative
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX

SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 1.2e+02;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13

Db 1 GGGCGGCAT 9

|||||||

RESULT 223

AAA03454

ID AAA03454 standard; DNA; 10 BP.

XX

AC AAA03454;

XX

DT 19-MAY-2000 (first entry)

XX

DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:738.

XX

KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

PN WO9963938-A2.

XX

PD 16-DEC-1999.

XX

PD 08-JUN-1999; 99WO-US012775.

XX

PR 08-JUN-1998; 98US-0088501P.

XX

PR 09-JUN-1998; 98US-00093972.

XX

PR 09-JUN-1998; 98US-0088657P.

XX

XX (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Hill JL;

XX

XX WPI; 2000-116433/10.

XX

XX Novel composition for treating or preventing e.g. cardiopulmonary and
PT renal injury.
XX
XX Claim 17; Page 35; 252pp; English.
XX
XX The present invention describes a pharmaceutical composition, comprising
CC at least one agent (I) that prevents, alleviates and/or inhibits
CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
CC (Ib), containing less than 15% adenosine (A), that is antisense to target
CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
CC ends or segments between coding and non-coding sequences), or to all
CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
CC and (Ib), and optionally also contains one or more surfactants. The
CC compositions are used to prevent, alleviate and/or treat adenosine
CC receptor-mediated cardiac, lung and/or renal damage or failure
CC (particularly where associated with ischaemia, toxin release and/or
CC administration of drugs or imaging agents, e.g. adenosine for treating
CC supraventricular tachycardia); (adult) respiratory distress syndrome
CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
CC pulmonary disease; cardiopulmonary hypoxia associated with administration
CC of stress-test agents, particularly where such conditions are associated
CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
CC AAA03715 represent specifically claimed phosphorothioate antisense
CC oligonucleotides for use in the composition of the present invention.
CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
CC phosphorothioate oligonucleotides used in the exemplification of the
CC present invention
XX
XX Sequence 10 BP; 2 A; 2 C; 5 G; 1 T; 0 U; 0 Other;
SQ

Query Match 56.2%; Score 9; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
|||||
DB 2 GGGCGGCAT 10

RESULT 224
AAF19235
ID AAF19235 standard; DNA; 10 BP.
XX
XX AAF19235;
AC
XX 14-MAR-2001 (first entry)
DT
XX
XX Human adenosine A1 receptor polynucleotide fragment #802.
DE
XX
XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cycostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200062736-A2.
PN
XX
XX 26-OCT-2000.
PD
XX
XX 24-MAR-2000; 2000WO-US008020.
PF
XX
XX 06-APR-1999; 99US-0127958P.
PR

XX (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
XX Nyce JW;
XX
XX WPI; 2000-679539/66.
XX
XX Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
XX Claim 14; Page 118; 1592pp; English.
XX
XX The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cycostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
XX Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
SQ

Query Match 56.2%; Score 9; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
|||||
DB 1 GGGCGGCAT 9

RESULT 225
AAF19217
ID AAF19217 standard; DNA; 10 BP.
XX
XX AAF19217;
AC
XX 14-MAR-2001 (first entry)
DT
XX
XX Human adenosine A1 receptor polynucleotide fragment #784.
DE
XX
XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cycostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX Homo sapiens.
 XX WO200285308-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013135.
 XX 24-APR-2001; 2001US-0286137P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX Disclosure; SEQ ID NO 10171; 872pp; English.
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 GGGCGGCAT 13
 Db 1 GGGCGGCAT 9
 RESULT 228
 ABZ94911
 ID ABZ94911 standard; DNA; 10 BP.
 XX AC ABZ94911;
 XX 17-OCT-2003 (first entry)
 DT
 DT Human adenosine A1 receptor antisense fragment no.774.
 DE
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX Homo sapiens.
 XX WO200285308-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013135.
 XX 24-APR-2001; 2001US-0286137P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX Disclosure; SEQ ID NO 10153; 872pp; English.
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 10 BP; 2 A; 2 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 GGGCGGCAT 13
 Db 2 GGGCGGCAT 10
 RESULT 229
 ABD17983
 ID ABD17983 standard; DNA; 10 BP.
 XX AC ABD17983;
 XX 29-JUL-2004 (first entry)
 DT
 DT Human adenosine A1 receptor DNA fragment #6.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.

XX Homo sapiens.

OS WO200285309-A2.

PN 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 11786; 763pp; English.

CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 10 BP; 0 A; 2 C; 7 G; 0 T; 0 U; 1 Other;

Query Match 56.2%; Score 9; DB 1; Length 10;

Best Local Similarity 90.0%; Pred. No. 1.2e+02;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11

DB 1 GCGGCGGCGGC 10

RESULT 230

ABD18759

ID ABD18759 standard; DNA; 10 BP.

XX ABD18759;

XX 29-JUL-2004 (first entry)

XX Human adenosine A1 receptor oligonucleotide fragment 774.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.

XX Homo sapiens.

OS WO200285309-A2.

PN 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 10153; 763pp; English.

CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or surfactant hypoproduction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 10 BP; 2 A; 2 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
 |||||
 Db 2 GGGCGGCAT 10
 |||||

RESULT 231
 ABD18777
 ID ABD18777 standard; DNA; 10 BP.
 XX ABD18777;
 AC ABD18777;
 XX 29-JUL-2004 (first entry)
 DT Human adenosine A1 receptor oligonucleotide fragment 792.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 10171; 763pp; English.
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 56.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
 |||||
 Db 1 GGGCGGCAT 9
 |||||

RESULT 232
 AAV47274
 ID AAV47274 standard; DNA; 11 BP.
 XX AAV47274;
 AC AAV47274;
 XX 10-NOV-1998 (first entry)
 DT
 XX Antisense oligonucleotide 774, targeting adenosine A1 receptor.
 DE
 XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 XX Synthetic.
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..11
 FT /*tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 XX WO9823294-A1.
 PN
 XX 04-JUN-1998.
 PD
 XX 26-NOV-1997; 97WO-US022017.
 PF
 XX 26-NOV-1996; 96US-00757024.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 XX
 XX Nyce JW;
 PI
 XX WPI; 1998-322464/28.
 DR
 XX Treating respiratory disease with antisense sequences directed against
 CC adenosine or bradykinin receptors - with localised delivery to the
 CC respiratory system, suitable for long term treatment of asthma, adult
 CC respiratory distress syndrome etc.
 XX
 XX Claim 12; Page 8-24; 47pp; English.
 PS
 XX Sequences AAV46501-VA7446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The

CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis

XX
 SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 GGGCGGCAT 13
 |||||
 Db 2 GGGCGGCAT 10

RESULT 233
 AAX53651
 ID AAX53651 standard; DNA; 11 BP.
 AC AAX53651;
 XX
 DT 05-JUL-1999 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide fragment.

XX
 KW Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impaired respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.

XX
 OS Synthetic.
 XX
 PN WO9913886-A1.
 XX
 PD 25-MAR-1999.
 XX
 PF 17-SEP-1998; 98WO-US019419.
 XX
 PR 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1999-229400/19.
 XX
 PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX
 PS Disclosure; Page 39; 120pp; English.

XX
 CC The specification describes antisense oligonucleotides (AAX52869-X52711)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the junction between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those

CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer

XX
 SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 GGGCGGCAT 13
 |||||
 Db 2 GGGCGGCAT 10

RESULT 234
 AAX33094
 ID AAX33094 standard; DNA; 11 BP.
 XX
 AC AAX33094;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Low adenosine antisense oligonucleotide SEQ ID NO:783.

XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX
 OS Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 PF 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 PT New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.

XX
 PS Claim 18; Page 364; 1343pp; English.

XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,

CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
 CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of
 CC ONS reduces side effects. The A-containing ONS break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33997) are specifically claimed ONS from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 56.2%; Score 9; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 GGGCGGCAT 13
 Db 2 GGGCGGCAT 10
 RESULT 235
 AAA03453
 ID AAA03453 standard; DNA; 11 BP.
 AC AAA03453;
 XX
 DT 19-MAY-2000 (first entry)
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:737.
 XX
 KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO963938-A2.
 XX
 PD 16-DEC-1999.
 XX
 PF 08-JUN-1999; 99WO-US012775.
 XX
 PR 08-JUN-1998; 98US-0088501P.
 PR 09-JUN-1998; 98US-00093972.
 PR 09-JUN-1998; 98US-0088657P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Hill JL;
 XX
 DR WPI; 2000-116433/10.
 XX
 PT Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX
 PS Claim 17; Page 35; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC

CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 CC
 XX
 SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 56.2%; Score 9; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 GGGCGGCAT 13
 Db 2 GGGCGGCAT 10
 RESULT 236
 AAF19216
 ID AAF19216 standard; DNA; 11 BP.
 XX
 AC AAF19216;
 XX
 DT 14-MAR-2001 (first entry)
 DE Human adenosine A1 receptor polynucleotide fragment #783.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory bronchodilator; anti-inflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 PT Low adenosine (A) content antisense oligonucleotides which do not trigger

PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.

XX Claim 14; Page 118; 1592pp; English.

XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

XX Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13
 Db |||||

Db 2 GGGCGGCAT 10

RESULT 237

AAA70570
 ID AAA70570 standard; DNA; 11 BP.

XX AAA70570;

XX 06-DEC-2000 (first entry)

XX Spl binding site as Shear Stress Response Element.

XX Cytostatic; cardiac; vasotropic; vulnary; antidiabetic; hypotensive;
 KW antiatherosclerotic; antilipemic; gene therapy; vector; SSRE; promoter;
 KW Shear Stress Response Element; antisense; ribozyme; repressor antibody;
 KW platelet derived growth factor A; PDGF-A; angiogenesis; ischaemia;
 KW cardiovascular disorder; neoplastic disorder; atherosclerosis; as;
 KW hypertension; diabetes; hypercholesterolaemia; wound healing.

XX Homo sapiens.

XX WO200039275-A2.

XX 06-JUL-2000.

XX 23-DEC-1999; 99WO-11000702.

XX 24-DEC-1998; 98US-00220510.

PR 24-DEC-1998; 98US-0113863P.

XX (FLOR-) FLORENCE MEDICAL LTD.

XX Resnick N;

XX WPI; 2000-452382/39.

XX Expression vector comprising multiple shear stress response elements,
 PT useful for modulating endothelial cell proliferation, stimulating or down
 PT -regulating angiogenesis and treating vasculogenic/angiogenic disorders.

XX Example 1; Page 45; 61pp; English.

XX The invention relates to the construction of a vector which comprises a
 CC multiple number of Shear Stress Response Elements (SSRE) from various
 CC gene promoter sequences and one or more genes, antisense molecules,
 CC ribozymes, double stranded RNA, or a nucleic acid which encodes a
 CC repressor antibody or a mutant protein which inhibits the synthesis of,
 CC or activity of the protein or peptide. This sequence represents the Sp1
 CC binding sequence used as SSRE. The vector is useful for stimulating or
 CC inhibiting vascular endothelial cell or capillary endothelial cell
 CC proliferation and for stimulating angiogenesis in cells. The vector or
 CC gene of interest is useful for modulating vascular permeability in a
 CC mammal, for stimulating or inhibiting the formation, maturation or
 CC regression of blood vessels, modulating genes or proteins involved in a
 CC diseases, down regulating angiogenesis and for treating vasculogenic
 CC and/or angiogenic disorders. These disorders include cardiovascular
 CC disorder, neoplastic disorders, ischaemia, atherosclerosis, hypertension,
 CC diabetes, hypercholesterolaemia and wound healing

XX Sequence 11 BP; 0 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 11;

Best Local Similarity 100.0%; Pred. No. 1.4e+02;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGCGG 10

Db |||||

Db 3 GCGCGGCGG 11

RESULT 238

ABZ94910

ID ABZ94910 standard; DNA; 11 BP.

XX ABZ94910;

XX 17-OCT-2003 (first entry)

XX Human adenosine A1 receptor antisense fragment no.773.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX Disclosure; SEQ ID NO 10152; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction.

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: the sequence data for this patent is not represented in the WIPO

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

SQ

Query Match 56.2%; Score 9; DB 1; Length 11;

Best Local Similarity 100.0%; Pred. No. 1.4e+02;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13

Db |||||

2 GGGCGGCAT 10

RESULT 239

ABD18758

ID ABD18758 standard; DNA; 11 BP.

XX

AC ABD18758;

XX

29-JUL-2004 (first entry)

XX

DE Human adenosine A1 receptor oligonucleotide fragment 773.

XX

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;

KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

KW pulmonary transplantation rejection; ds.

XX

OS Homo sapiens.

XX

XX WO200285309-A2.

PN

31-OCT-2002.

XX

23-APR-2002; 2002WO-US013143.

XX

24-APR-2001; 2001US-0286036P.

PR

(EPIG-) EPIGENESIS PHARM INC.

PA

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX Claim 15; SEQ ID NO 10152; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,

CC comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has antiallergic, antiinflammatory, antiasthmatic, is a

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered or

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer.

CC Transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of

CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it

XX

SQ Sequence 11 BP; 2 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 56.2%; Score 9; DB 1; Length 11;

Best Local Similarity 100.0%; Pred. No. 1.4e+02;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 GGGCGGCAT 13

Db |||||

2 GGGCGGCAT 10

RESULT 240

AAV18495/c

ID AAV18495 standard; DNA; 12 BP.

XX

AC AAV18495;

XX

18-AUG-1998 (first entry)

XX

XX Random primed reverse transcription PCR primer 95.

DE

XX RT-PCR; primer; amplification; reverse transcription; RNA fingerprinting;

KW differential gene expression; ss.

XX

OS Synthetic.

XX

XX WO9813521-A1.

PN

02-APR-1998.

PD

26-SEP-1997; 97WO-EP005290.

PF

XX 27-SEP-1996; 96GB-00020216.
 XX (SANR-) FOND CENT SAN RAFFAELE DEL MONTE TABOR.
 XX Consalez G, Fesce R;
 XX WPI; 1998-230725/20.
 XX
 XX Differential screening of gene expression by reverse transcription
 PT polymerase chain reaction - uses random priming with primers selected for
 PT high efficiency and selectivity by computer screening of database(s).
 XX
 XX Claim 9; Page 24; 37pp; English.
 XX
 XX The invention provides a method for the differential screening of gene
 CC expression by random primed reverse transcription PCR (RT-PCR). The
 CC primer sequences are generated by stimulating PCR reactions on non-
 CC redundant mammalian nucleotide sequence databank entries containing at
 CC least 1,000 bp of coding region. The primers selected, such as the
 CC present one, had to meet various criteria such as having an efficiency
 CC index between 2-10, having a selectivity index higher than 1, being 12 bp
 CC long i.e. 8 C or G and 4 T or A, and each primer differed from the others
 CC in at least 5 of the 8 bases at the 3'-end. The invention claims the
 CC selected primers make it possible to use internally primed, PCR-based RNA
 CC fingerprinting for simple, exhaustive and systematic analysis of
 CC differential gene expression as an advantageous alternative to
 CC differential display. The method can also be useful for isolating new
 CC coding sequences and to compare known and new genes
 XX
 XX Sequence 12 BP; 1 A; 4 C; 3 G; 3 T; 0 U; 1 Other;
 SQ
 Query Match 56.2%; Score 9; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 7 GCGGCATCG 15
 Db 10 GCGGCATCG 2
 |||||
 RESULT 241
 ABI22886
 ID ABI22886 standard; DNA; 12 BP.
 XX
 XX AC ABI22886;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 XX
 XX Oligonucleotide primer SEQ ID NO 322859 for detecting SNP TSC0031084.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO200177384-A2.
 PN
 XX
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX
 XX WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 322859; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 12 BP; 0 A; 5 C; 7 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 56.2%; Score 9; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGCGGCG 9
 Db 3 CGCGCGGCG 11
 |||||
 RESULT 242
 ABH69684/c
 ID ABH69684 standard; DNA; 12 BP.
 XX
 XX AC ABH69684;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 XX
 XX Oligonucleotide primer SEQ ID NO 269661 for detecting SNP TSC0001842.
 DE
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO200177384-A2.
 PN
 XX
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX
 XX WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 269661; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 1 A; 7 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 56.2%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGCGGGCGG 10
|||||
Db 11 GGCGGGCGG 3

RESULT 243
ABH89852/c
ID ABH89852 standard; DNA; 12 BP.
XX
AC ABH89852;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 289845 for detecting SNP TSC0014116.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 289845; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 2 A; 7 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 56.2%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 9
|||||
Db 11 CGCGGGCGG 3

RESULT 244
ABI22877
ID ABI22877 standard; DNA; 12 BP.
XX
AC ABI22877;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 322850 for detecting SNP TSC0031084.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 322850; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 0 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 56.2%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 9
|||||
Db 3 CGCGGGCGG 11

RESULT 245
ABI22881
ID ABI22881 standard; DNA; 12 BP.
XX
AC ABI22881;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 322854 for detecting SNP TSC0031084.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX PD
 XX PF
 XX 06-APR-2001; 2001WO-IB000713.
 XX PR
 XX 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX WI; 2001-657177/75.
 XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PT designed to detect single-nucleotide polymorphisms and cytosine
 XX PT methylation status.
 XX PS Claim 1; SEQ ID NO 322854; 29pp + Sequence Listing; German.
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX CC
 XX SQ Sequence 12 BP; 0 A; 4 C; 7 G; 1 T; 0 U; 0 Other;
 CC Query Match 56.2%; Score 9; DB 1; Length 12;
 CC Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 CC Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGCGGCGC 9
 Db 3 CGCGCGGCGC 11
 RESULT 246
 ABI22885
 ID ABI22885 standard; DNA; 12 BP.
 XX AC ABI22885;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide primer SEQ ID NO 322854 for detecting SNP TSC0031084.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX WI; 2001-657177/75.
 XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PT designed to detect single-nucleotide polymorphisms and cytosine
 XX PT methylation status.
 XX PS Claim 1; SEQ ID NO 322854; 29pp + Sequence Listing; German.
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX CC
 XX SQ Sequence 12 BP; 0 A; 4 C; 7 G; 1 T; 0 U; 0 Other;
 CC Query Match 56.2%; Score 9; DB 1; Length 12;
 CC Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 CC Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGCGGCGC 9
 Db 3 CGCGCGGCGC 11
 RESULT 247
 ADA37069/C
 ID ADA37069 standard; DNA; 12 BP.
 XX AC ADA37069;
 XX DT 20-NOV-2003 (first entry)
 XX DE Human p19 core promoter region sequence SEQ ID NO:9.
 XX KW INK4 family gene expression; INK4 family; cytostatic; antianaemic;
 KW hepatotropic; cerebroprotective; cardiant; vulnary; cancer;
 KW hypoplastic anaemia; hepatocirrhosis; myocardial infarction;
 KW cerebral apoplexia; human; p19; promoter; ds.
 XX OS Synthetic.
 XX OS Homo sapiens.
 XX PN WO2003068957-A1.
 XX PD 21-AUG-2003.
 XX PF 12-FEB-2003; 2003WO-JP001420.
 XX PR 12-FEB-2002; 2002JP-00033724.
 XX PS (KANS-) KANSAI TECHNOLOGY LICENSING ORG CO LTD.
 XX PI Sakai T;
 XX WI; 2003-671660/63.
 XX DR Screening of INK4 family gene expression controller with e.g. p19
 XX PT promoter, for use in preventives and remedies for cancer, hypoplastic
 XX PT anemia, hepatocirrhosis, myocardial infarction, apoplexy and wounds.
 XX PS Example 6; Page 32; 68pp; Japanese.

PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX WI; 2001-657177/75.
 XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PT designed to detect single-nucleotide polymorphisms and cytosine
 XX PT methylation status.
 XX PS Claim 1; SEQ ID NO 322858; 29pp + Sequence Listing; German.
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX CC
 XX SQ Sequence 12 BP; 0 A; 4 C; 7 G; 1 T; 0 U; 0 Other;
 CC Query Match 56.2%; Score 9; DB 1; Length 12;
 CC Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 CC Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGCGGCGC 9
 Db 3 CGCGCGGCGC 11
 RESULT 247
 ADA37069/C
 ID ADA37069 standard; DNA; 12 BP.
 XX AC ADA37069;
 XX DT 20-NOV-2003 (first entry)
 XX DE Human p19 core promoter region sequence SEQ ID NO:9.
 XX KW INK4 family gene expression; INK4 family; cytostatic; antianaemic;
 KW hepatotropic; cerebroprotective; cardiant; vulnary; cancer;
 KW hypoplastic anaemia; hepatocirrhosis; myocardial infarction;
 KW cerebral apoplexia; human; p19; promoter; ds.
 XX OS Synthetic.
 XX OS Homo sapiens.
 XX PN WO2003068957-A1.
 XX PD 21-AUG-2003.
 XX PF 12-FEB-2003; 2003WO-JP001420.
 XX PR 12-FEB-2002; 2002JP-00033724.
 XX PS (KANS-) KANSAI TECHNOLOGY LICENSING ORG CO LTD.
 XX PI Sakai T;
 XX WI; 2003-671660/63.
 XX DR Screening of INK4 family gene expression controller with e.g. p19
 XX PT promoter, for use in preventives and remedies for cancer, hypoplastic
 XX PT anemia, hepatocirrhosis, myocardial infarction, apoplexy and wounds.
 XX PS Example 6; Page 32; 68pp; Japanese.

XX The present invention describes a method for screening controllers of
CC INK4 family gene expression comprising: (a) contacting a test substance
CC with test cells sustaining at least 1 structural gene located at a
CC position at which it can be controlled by the promoter; and (b) comparing
CC expression dose of such structural gene in the cells with that obtained
CC in a non-contact run for selection of a substance affecting expression
CC dose of such structural gene in the cells. INK4 family gene expression
CC controllers have cytostatic, antineoplastic, hepatotropic,
CC cerebroprotective, cardiant and vulnerary activities. The screened
CC substances can be used in preventives and remedies for cancer,
CC hypoplastic anaemia, hepatocirrhosis, myocardial infarction, cerebral
CC apoplexia and wounds. The present sequence represents a human p19 core
CC promoter region, belonging to the INK4 family, which is used in the
CC exemplification of the present invention.

XX SQ Sequence 12 BP; 0 A; 7 C; 4 G; 1 T; 0 U; 0 Other;
Query Match 56.2%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGCGCGGCG 9
Db 9 CGCGCGGCG 1

RESULT 248
ADE14348/c
ID ADE14348 standard; DNA; 12 BP.
AC ADE14348;
XX
XX 29-JAN-2004 (first entry)
DT Optineurin promoter motif, repeat element or regulatory region #457.
DE Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
KW SNP; glaucoma; progressive ocular hypertensive disorder;
KW glaucoma related disorder; motif; repeat element; regulatory region.
XX Homo sapiens.
XX US2003190617-A1.
XX 09-OCT-2003.
XX 06-MAR-2002; 2002US-00091281.
XX 06-MAR-2002; 2002US-00091281.
XX (SIEE/) SI E.
PA (RAYM/) RAYMOND V.
PA (MORI/) MORISSETTE J.
XX Raymond V, Morissette J, Si E;
XX WPI; 2003-864168/80.
XX
XX New nucleic acid sequences of the optineurin gene are useful to detect
PT polymorphisms particularly single nucleotide polymorphisms in the
PT optineurin promoter to diagnose, prognosis and treat glaucoma and related
PT disorders.
XX Claim 11; SEQ ID NO 459; 159pp; English.

XX The invention relates to an isolated nucleic acid (N1) comprising at
CC least 20 but not more than 1500 consecutive nucleotides of the optineurin
CC promoter appearing as ADE13890. Also included are the optineurin promoter
CC operably linked to a heterologous nucleic acid, a nucleic acid capable of
CC detecting a single nucleotide polymorphism (SNP) in the optineurin
CC promoter, a host cell comprising the promoter operably linked to a
CC heterologous sequence, diagnosing or prognosing glaucoma in a sample

CC obtained from a cell or bodily fluid (comprising detecting a polymorphism
CC in a promoter region of the optineurin gene, associated with a glaucoma
CC phenotype), detecting a SNP sequence variation in a sample containing
CC DNA, detecting the presence of an optineurin promoter sequence variation
CC in a sample containing DNA, determining the presence or increased
CC susceptibility to glaucoma or to a progressive ocular hypertensive
CC disorder resulting in loss of visual field in a patient (or the severity
CC or progression of glaucoma in a patient, comprising providing
CC amplification reaction primers that direct amplification of a selected
CC nucleic acid region containing the variation within the optineurin
CC promoter and amplifying the DNA) and detecting a polymorphism (comprising
CC obtaining a sample containing human genomic DNA, providing a nucleic acid
CC capable of detecting a SNP located within an optineurin promoter, and
CC detecting the polymorphism). The invention is used to diagnose and
CC prognose glaucoma and also to treat glaucoma related disorders. The
CC present sequence is an optineurin promoter motif, repeat element or
CC putative regulatory region.

XX SQ Sequence 12 BP; 1 A; 7 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 56.2%; Score 9; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGCGCGGCG 9
Db 9 CGCGCGGCG 1

RESULT 249
AAQ80639/c
ID AAQ80639 standard; DNA; 12 BP.
XX
XX AAQ80639;
XX
XX 25-MAR-2003 (revised)
DT 03-NOV-1995 (first entry)
XX Neisseria gonorrhoeae detection PCR antisense primer Pn B2.
DE
XX Primer; PCR; LCR; amplification; Neisseria gonorrhoeae p16 gene; ss.
XX Synthetic.
XX WO9506749-A1.
XX 09-MAR-1995.
XX 18-AUG-1994; 94WO-US009318.
XX 03-SEP-1993; 93US-00116388.
XX (ABBO) ABBOTT LAB.
XX Birkenmeyer LG, Ching S, Ohhashi Y, Winkler JK;
XX WPI; 1995-115461/15.
XX
XX Detection of Neisseria gonorrhoeae DNA - using oligo:nucleotide probes
PT and primers based on the p16 gene of N. gonorrhoeae.
XX Claim 1; Page 5; 29pp; English.

XX Primers AAQ80633-39 are primers synthesised based on the sequence of the
CC Neisseria gonorrhoeae p16 gene between bases 827-972 (see AAQ80641).
CC This primer is based on the sequence between bases 945-934 of the p16
CC gene. The primers can be used to PCR amplify this region for detection by
CC hybridisation with probe AAQ80640. The primers are used in primers sets:
CC the forward primers being AAQ80633, AAQ80635, AAQ80636 or AAQ80638 and
CC the reverse primers: AAQ80634, Q80637 or 80639. These primers and those in
CC AAQ80642-5 can be used in kits for the detection of N.gonorrhoeae
CC infections. (Updated on 25-MAR-2003 to correct PN field.)

```

SQ Sequence 12 BP; 2 A; 8 C; 2 G; 0 T; 0 U; 0 Other;

Query Match      55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 1.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 GGGCGGCATCGT 16
Db 12 GGGCGGGTCTG 1

RESULT 250
AAAS3932/C
ID AAAS3932 standard; DNA; 12 BP.
XX
AC AAAS3932;
XX
DT 03-JAN-2001 (first entry)
XX
DE Oligonucleotide linker used in adenyl cyclase C_1/C_2 chimera.
XX
KW Adenyl cyclase; type I; type II; recombinant; enzyme; cAMP; cyclic AMP;
KW adenosine monophosphate; screening; stimulation; inhibition; treatment;
KW cholera; pituitary tumour; heart failure; ischaemia; endocrine disorder;
KW cell necrosis; pseudohypoparathyroidism; endocrine deficiency; human; ss.
XX
OS Homo sapiens.
XX
PN US6107076-A.
XX
PD 22-AUG-2000.
XX
PF 04-OCT-1996; 96US-00726214.
XX
PR 04-OCT-1995; 95US-0005498P.
XX
PA (TEXA ) UNIV TEXAS SYSTEM.
XX
PI Gilman AG, Tang W;
XX
WPI; 2000-578539/54.
XX
Novel soluble mammalian polypeptide composition comprising adenyl
PT cyclase activity for screening stimulators and inhibitors of adenyl
PT cyclase, is activated by Gsalpha.
XX
PS Example 3; Col 19; 73pp; English.
XX
CC A recombinant Adenyl cyclase is described which lacks membrane bound
CC domains. Separation and purification of the recombinant enzyme is much
CC easier compared with wild type enzymes and the recombinant enzyme is more
CC stable than the wild type enzyme which allows easier screening of
CC compounds that stimulate and inhibit Adenyl cyclase activity. The
CC recombinant adenyl cyclase comprises a chimera of adenyl cyclase C_1
CC and C_2 domains linked covalently. The domains may be linked by a linker
CC peptide. The recombinant adenyl cyclase is useful for screening
CC inhibitors and stimulators of adenyl cyclase activity. Inhibitors of
CC the enzyme are useful for treating cholera, pituitary tumors, heart
CC failure, ischaemia, endocrine disorders and cell necrosis. Stimulators of
CC adenyl cyclase are useful for treating pseudohypoparathyroidism and
CC other endocrine deficiencies
XX
SQ Sequence 12 BP; 2 A; 5 C; 3 G; 2 T; 0 U; 0 Other;

Query Match      55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 1.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGGCGGCATC 14
Db 12 GCTGGAGGCATC 1

ngs20.res

RESULT 251
AAF61446/C
ID AAF61446 standard; RNA; 12 BP.
XX
AC AAF61446;
XX
DT 18-JUN-2001 (first entry)
XX
DE Cyclin E2F1 binding hammerhead ribozyme 5' RNA fragment SEQ ID 15.
XX
KW Hammerhead ribozyme; cyclin E; restenosis; catalytic; angioplasty;
KW cyclin E2F1; vasotropic; gene therapy; cell cycle arrest; ss.
XX
OS Synthetic.
XX
PN WO200121789-A1.
XX
PD 29-MAR-2001.
XX
PF 22-SEP-1999; 99WO-EP007049.
XX
PR 22-SEP-1999; 99WO-EP007049.
XX
PA (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS.
XX
PI Grassi G, Kuhn AC, Kandolf R;
XX
WPI; 2001-257985/26.
XX
New catalytically acting RNA molecule comprising hammerhead ribozyme
PT directed against mRNA molecules encoding cyclin E or E2F1, useful for
PT inhibiting vascular smooth muscle cell proliferation and restenosis.
XX
PS Claim 10; Page 27; 40pp; German.
XX
CC This invention describes a novel catalytic RNA molecule which is directed
CC against mRNA molecules (II) which encode the cell-relevant protein cyclin
CC E or E2F1. The products of the invention have vasotropic activity and can
CC be used for gene therapy. The use of (I), or a DNA molecule or a plasmid
CC of the invention is claimed for obtaining a vector for gene therapy and
CC for inhibiting restenosis of blood vessel after angioplasty; therapeutic
CC compositions containing these components are also claimed. (I)
CC efficiently induces cell cycle arrest by combined inactivation of cyclin
CC E and E2F1
XX
SQ Sequence 12 BP; 2 A; 6 C; 3 G; 0 T; 1 U; 0 Other;

Query Match      55.0%; Score 8.8; DB 1; Length 12;
Best Local Similarity 83.3%; Pred. No. 1.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GCGGCGGCAT 13
Db 12 GCGGAGCGGCTT 1

RESULT 252
ABI11824
ID ABI11824 standard; DNA; 12 BP.
XX
AC ABI11824;
XX
DT 22-FEB-2002 (first entry)
XX
XX
XX Oligonucleotide primer SEQ ID NO 311797 for detecting SNP TSC0024693.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.

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XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB0000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPiG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX PS Claim 1; SEQ ID NO 311797; 29pp + Sequence Listing; German.
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 12 BP; 0 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
 CC Query Match 55.0%; Score 8.8; DB 1; Length 12;
 CC Best Local Similarity 83.3%; Pred. No. 1.8e+02;
 CC Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGCAT 13
 DB 1 GGTGGCGGCGGT 12
 RESULT 253
 ABH99704/C
 ID ABH99704 standard; DNA; 12 BP.
 XX AC ABH99704;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide primer SEQ ID NO 299697 for detecting SNP TSC0018689.
 XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB0000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPiG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX PS Claim 1; SEQ ID NO 299697; 29pp + Sequence Listing; German.
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 12 BP; 2 A; 8 C; 1 G; 1 T; 0 U; 0 Other;
 CC Query Match 55.0%; Score 8.8; DB 1; Length 12;
 CC Best Local Similarity 83.3%; Pred. No. 1.8e+02;
 CC Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 5 GCGCGGCGGCATCT 16
 DB 12 GCGCGGCGGCATGT 1
 RESULT 254
 AAQ01757/C
 ID AAQ01757 standard; DNA; 10 BP.
 XX AC AAQ01757;
 XX DT 25-MAR-2003 (revised)
 DT 09-JAN-2003 (revised)
 DT 02-AUG-1990 (first entry)
 XX DE Regulatory sequence probe used to isolate antibiotic biosynthetic or
 DE resistance-conferring genes.
 XX KW Antibiotic biosynthetic gene; resistance-conferring gene.
 XX OS Synthetic.
 XX PN EP354641-A.
 XX PD 14-FEB-1990.
 XX PF 10-MAY-1989; 89EP-00304716.
 XX PR 13-MAY-1988; 88US-00194672.
 XX PA (ELIL) LILLY & CO ELI.
 XX PI Epp JK, Schoner BE;
 XX DR WPI; 1990-046338/07.
 XX PT Car E gene encoding 4"-O-isovaleryl:acylase - used to transform cells to
 PT increase prodn. of carbomycin or other antibiotics or to produce new
 PT antibiotics.
 XX PS Claim 13; Page 21; 28pp; English.
 XX CC The method it is used in involves creating gene libraries of antibiotic-
 CC producing organisms, probing them with it, and isolating antibiotic
 CC biosynthetic or resistance-conferring genes which hybridize to it.
 CC (Updated on 09-JAN-2003 to add missing OS field.) (Updated on 25-MAR-2003
 CC to correct PA field.)
 XX

SQ Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 10
 | | | | | | |
 Db 10 CGCGGACG 1

RESULT 255
 AAV47256
 ID AAV47256 standard; DNA; 10 BP.
 XX
 AC AAV47256;
 XX
 DT 10-NOV-1998 (first entry)
 XX
 DE Antisense oligonucleotide 756, targeting adenosine A1 receptor.
 XX
 KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..10
 FT /*tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 PN WO9823294-A1.
 XX
 PD 04-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US022017.
 XX
 PR 26-NOV-1996; 96US-00757024.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1998-322464/28.
 XX
 PT Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX
 PS Claim 12; Page 8-24; 47pp; English.
 XX
 CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCA 12
 | | | | | | |
 Db 1 GAGGGCGGCA 10

RESULT 256
 AAV47236
 ID AAV47236 standard; DNA; 10 BP.
 XX
 AC AAV47236;
 XX
 DT 10-NOV-1998 (first entry)
 XX
 DE Antisense oligonucleotide 736, targeting adenosine A1 receptor.
 XX
 KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..10
 FT /*tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 PN WO9823294-A1.
 XX
 PD 04-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US022017.
 XX
 PR 26-NOV-1996; 96US-00757024.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1998-322464/28.
 XX
 PT Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX
 PS Claim 12; Page 8-24; 47pp; English.
 XX
 CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGCGGC 11
 |||||
 Db 1 GGAGGCGGC 10

RESULT 257
 AAV47310
 ID AAV47310 standard; DNA; 10 BP.
 XX
 AC AAV47310;
 XX
 DT 10-NOV-1998 (first entry)
 XX
 DE Antisense oligonucleotide 810, targeting adenosine A1 receptor.
 XX
 KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1...10
 FT /tag= a
 FT /note= "contains phosphorothioate internucleotide
 linkages"
 XX
 PN WO9823294-A1.
 XX
 PD 04-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US022017.
 XX
 PR 26-NOV-1996; 96US-00757024.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1998-322464/28.
 XX
 PT Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX
 PS Claim 12; Page 8-24; 47pp; English.
 XX
 CC Sequences AAV46501-VA7446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATCG 15
 |||||
 Db 1 GGCGGCATGG 10

RESULT 258
 AAX53687
 ID AAX53687 standard; DNA; 10 BP.
 XX
 AC AAX53687;
 XX
 DT 05-JUL-1999 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide fragment.
 XX
 KW Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthetic.
 OS WO9913886-A1.
 XX
 PN 25-MAR-1999.
 PD
 PF 17-SEP-1998; 98WO-US019419.
 XX
 PR 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1999-229400/19.
 XX
 PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 XX
 PS Disclosure; Page 40; 120pp; English.
 XX
 CC The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC segments of the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 GCGGCGCATCG 15
| | | | | | | | | |
Db 1 GCGGCGCATGG 10

RESULT 259
AA53633
ID AAX53633 standard; DNA; 10 BP.
XX
AC AAX53633;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
WPI; 1999-229400/19.
XX
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 39; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55180-271. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 10 BP; 2 A; 2 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGCGCGCA 12
| | | | | | | | | |
Db 1 GAGGCGCGCA 10

RESULT 260
AA53613
ID AAX53613 standard; DNA; 10 BP.
XX
AC AAX53613;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
WPI; 1999-229400/19.
XX
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 39; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55180-271. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX

SQ Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGCGCGCGC 11
 DB 1 GGAGGCGCGC 10
 RESULT 261
 AAA33130
 ID AAA33130 standard; DNA; 10 BP.
 XX
 AC AAA33130;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Low adenosine antisense oligonucleotide SEQ ID NO:819.
 XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 XX 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 PS Claim 18; Page 368; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytotatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impaired respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ

CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GCGCGCATCG 15
 DB 1 GCGCGCATGG 10
 RESULT 262
 AAA33056
 ID AAA33056 standard; DNA; 10 BP.
 XX
 AC AAA33056;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Low adenosine antisense oligonucleotide SEQ ID NO:745.
 XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 XX 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 PS New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 Claim 18; Page 359; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytotatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impaired respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the

CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGGGCGC 11
 DB 1 GCGGGGGCGC 10
 RESULT 263
 AAA33076
 ID AAA33076 standard; DNA; 10 BP.
 AC AAA33076;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Low adenosine antisense oligonucleotide SEQ ID NO:765.
 XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 PF 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 PS Claim 18; Page 362; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating

CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGGGGCGCA 12
 DB 1 GAGGGGGCGCA 10
 RESULT 264
 AA283213/c
 ID AA283213 standard; DNA; 10 BP.
 XX
 AC AA283213;
 XX
 DT 07-APR-2000 (first entry)
 XX
 DE Metastatic breast tumour cell upregulated transcript tag #2447.
 DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;
 KW non-metastatic breast tumour tissue; gene therapy; anticancer;
 KW antimetastatic; vaccine; diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9965928-A2.
 XX
 PD 23-DEC-1999.
 XX
 PF 18-JUN-1999; 99WO-US013647.
 XX
 PR 19-JUN-1998; 98US-0089853P.
 PR 19-JUN-1998; 98US-0089997P.
 PR 19-JUN-1998; 98US-0090039P.
 PR 19-JUN-1998; 98US-0090040P.
 PR 19-JUN-1998; 98US-0090041P.
 XX
 PA (GENZ) GENZYME CORP.
 PA (ROBE/) ROBERTS B L.
 PA (SHAN/) SHANKARA S.
 XX
 PI Roberts BL, Shankara S;
 XX
 DR WPI; 2000-106079/09.
 XX
 PT Isolated polynucleotides differentially expressed between metastatic and
 PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
 PT treatment of cancer.
 XX
 PS Claim 1; Page 125; 219pp; English.
 XX
 CC AA280767 to AA283941 represent tags corresponding to distinct transcripts
 CC that are preferentially transcribed in the metastatic breast tumour

CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
 CC to AAZ86677 represent tags corresponding to distinct transcripts that are
 CC preferentially transcribed in the primary or non-metastatic breast tumour
 CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
 CC transcripts can be used for diagnosis, prognosis, monitoring and
 CC treatment of breast cancer, particularly where metastatic. Diagnosis is
 CC by standard immunoassays or hybridisation/amplification reactions.
 CC Compounds that modulate expression of the transcripts are potentially
 CC useful for treatment of (metastatic) breast cancer, while promoters from
 CC the transcripts are used to direct expression, in selected cell types, of
 CC e.g. therapeutic genes (also ribozymes or antisense sequences),
 CC particularly an antigen-encoding sequence for use in gene or cell-based
 CC vaccines. Polypeptides encoded by the transcripts are also useful in
 CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
 CC agents. Host cells that produce the polypeptides can be used to expand
 CC and isolate populations of educated, antigen-specific immune effector
 CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
 CC immunotherapy
 XX
 SQ Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGC 11
 ||| |||||
 Db 10 GCGAGCGGC 1
 RESULT 265
 AAZ83798/C
 ID AAZ83798 standard; DNA; 10 BP.
 XX
 AC AAZ83798;
 XX
 DT 07-APR-2000 (first entry)
 DE Metastatic breast tumour cell upregulated transcript tag #3032.
 XX
 DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;
 KW non-metastatic breast tumour tissue; gene therapy; anticancer;
 KW antimetastatic; vaccine; diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9965928-A2.
 XX
 PD 23-DEC-1999.
 XX
 PF 18-JUN-1999; 99WO-US013647.
 XX
 PR 19-JUN-1998; 98US-0089853P.
 PR 19-JUN-1998; 98US-008997P.
 PR 19-JUN-1998; 98US-0090039P.
 PR 19-JUN-1998; 98US-0090040P.
 PR 19-JUN-1998; 98US-0090041P.
 XX
 PA (GENZ) GENZYME CORP.
 PA (ROBE/) ROBERTS B L.
 PA (SHAN/) SHANKARA S.
 XX
 PI Roberts BL, Shankara S;
 XX
 DR WPI; 2000-106079/09.
 XX
 XX Isolated polynucleotides differentially expressed between metastatic and
 PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
 PT treatment of cancer.
 XX
 PS Claim 1; Page 140; 219pp; English.
 XX

CC AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
 CC that are preferentially transcribed in the metastatic breast tumour
 CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
 CC to AAZ86677 represent tags corresponding to distinct transcripts that are
 CC preferentially transcribed in the primary or non-metastatic breast tumour
 CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
 CC transcripts can be used for diagnosis, prognosis, monitoring and
 CC treatment of breast cancer, particularly where metastatic. Diagnosis is
 CC by standard immunoassays or hybridisation/amplification reactions.
 CC Compounds that modulate expression of the transcripts are potentially
 CC useful for treatment of (metastatic) breast cancer, while promoters from
 CC the transcripts are used to direct expression, in selected cell types, of
 CC e.g. therapeutic genes (also ribozymes or antisense sequences),
 CC particularly an antigen-encoding sequence for use in gene or cell-based
 CC vaccines. Polypeptides encoded by the transcripts are also useful in
 CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
 CC agents. Host cells that produce the polypeptides can be used to expand
 CC and isolate populations of educated, antigen-specific immune effector
 CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
 CC immunotherapy
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 7 GCGGCATCGT 16
 ||| |||||
 Db 10 GCAGCATCGT 1
 RESULT 266
 AAA03415
 ID AAA03415 standard; DNA; 10 BP.
 XX
 AC AAA03415;
 XX
 DT 19-MAY-2000 (first entry)
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:699.
 XX
 DE Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO9963938-A2.
 XX
 PD 16-DEC-1999.
 XX
 PF 08-JUN-1999; 99WO-US012775.
 XX
 PR 08-JUN-1998; 98US-0088501P.
 PR 09-JUN-1998; 98US-00093972.
 PR 09-JUN-1998; 98US-0088657P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Hill JL;
 XX
 DR WPI; 2000-116433/10.
 XX
 PT Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 XX

PS Claim 17; Page 34; 252pp; English.

XX The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3',
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention

XX Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;

QY Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Db Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGCG 11
 Db 1 GGAGGGCGGC 10
 ||| |||||

RESULT 267

AAA03435

ID AAA03435 standard; DNA; 10 BP.

XX AAA03435;

XX 19-MAY-2000 (first entry)

DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:719.

XX Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.

XX Homo sapiens.
 OS Synthetic.

XX WO963938-A2.

PN 16-DEC-1999.

XX 08-JUN-1999; 99WO-US012775.

XX 08-JUN-1998; 98US-0088501P.

PR 09-JUN-1998; 98US-00093972.

PR 09-JUN-1998; 98US-0088657P.

XX (EPIC-) EPIGENESIS PHARM INC.

PA Nyce JW, Hill JL;

XX WPI; 2000-116433/10.

XX Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.

PS Claim 17; Page 34; 252pp; English.

XX The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3',
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention

XX Sequence 10 BP; 2 A; 2 C; 6 G; 0 T; 0 U; 0 Other;

QY Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Db Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGCA 12
 Db 1 GAGGGCGGCA 10
 ||| |||||

RESULT 268

AAA03489

ID AAA03489 standard; DNA; 10 BP.

XX AAA03489;

XX 19-MAY-2000 (first entry)

DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:773.

XX Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.

XX Homo sapiens.
 OS Synthetic.

XX WO963938-A2.

PN 16-DEC-1999.

XX 08-JUN-1999; 99WO-US012775.

XX 08-JUN-1998; 98US-0088501P.

```

PR 09-JUN-1998; 98US-00093972.
PR 09-JUN-1998; 98US-008657F.
XX PA (EPIC-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Hill JL;
XX DR WPI; 2000-116433/10.
XX Novel composition for treating or preventing e.g. cardiopulmonary and
XX renal injury.
XX Claim 17; Page 35; 252pp; English.
XX The present invention describes a pharmaceutical composition, comprising
XX at least one agent (I) that prevents, alleviates and/or inhibits
XX adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
XX (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
XX (Ib), containing less than 15% adenosine (A), that is antisense to target
XX genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
XX ends or segments between coding and non-coding sequences), or to all
XX segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
XX has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
XX least no agonist activity at this receptor). (I) may be a mixture of (Ia)
XX and (Ib), and optionally also contains one or more surfactants. The
XX compositions are used to prevent, alleviate and/or treat adenosine
XX receptor-mediated cardiac, lung and/or renal damage or failure
XX (particularly where associated with ischaemia, toxin release and/or
XX administration of drugs or imaging agents, e.g. adenosine for treating
XX supraventricular tachycardia); (adult) respiratory distress syndrome
XX (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
XX pulmonary disease; cardiopulmonary hypoxia associated with administration
XX of stress-test agents, particularly where such conditions are associated
XX with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
XX AAA03715 represent specifically claimed phosphorothioate antisense
XX oligonucleotides for use in the composition of the present invention.
XX AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
XX phosphorothioate oligonucleotides used in the exemplification of the
XX present invention
XX Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 GGCGGCATCG 15
Db 1 GGCGGCATCG 10
RESULT 269
AAF19178
ID AAF19178 standard; DNA; 10 BP.
XX AC AAF19178;
XX 14-MAR-2001 (first entry)
XX Human adenosine A1 receptor polynucleotide fragment #745.
XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
XX human; airway disorder; bronchoconstriction; lung inflammation;
XX surfactant depletion; respiratory bronchodilator; antiinflammatory;
XX immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
XX respiratory obstruction; pulmonary obstruction; impeded respiration;
XX surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
XX respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
XX pulmonary hypertension; emphysema; pulmonary transplantation rejection;
XX chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
XX cancer; ss.
XX Homo sapiens.
OS

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XX WO200062736-A2.
XX 26-OCT-2000.
XX 24-MAR-2000; 2000WO-US008020.
XX 06-APR-1999; 99US-0127958P.
XX (UYEC-) UNIV EAST CAROLINA.
XX (NYCE/) NYCE J W.
XX Nyce JW;
XX WPI; 2000-679539/66.
XX Low adenosine (A) content antisense oligonucleotides which do not trigger
XX adenosine receptors during metabolism, useful e.g. for treating cancers
XX and respiratory obstructions.
XX Claim 14; Page 117; 1592pp; English.
XX The present invention describes low adenosine (A) content antisense
XX oligonucleotides and compositions (I) comprising them. In the antisense
XX oligonucleotides the A is replaced by a 'Universal' or alternative base.
XX (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
XX immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
XX The antisense oligonucleotides and (I) can be used to down-regulate the
XX expression and/or activity of target polypeptides associated with
XX lung/respiratory disorders and malignancies, such as stimulating and
XX activating peptide factors and transmitters, transcription factors,
XX immunoglobulins and antibodies, antibody receptors, cytokines and
XX chemokines, endogenously produced specific and non-specific enzymes,
XX binding proteins, adhesion molecules and their receptors, cytokine and
XX chemokine receptors, adenosine receptors, bradykinin receptors, central
XX nervous system (CNS) and peripheral nervous and non-nervous system
XX receptors, CNS and peripheral nervous and non-nervous system peptide
XX transmitters, defensins, growth factors, vasoactive peptides and
XX receptors, binding proteins and malignancy associated proteins. The
XX antisense oligonucleotides may be used in this way to treat disorders
XX including respiratory obstruction (especially pulmonary obstruction
XX and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
XX surfactant hypoproduction which are associated with a disease or
XX condition selected from pulmonary vasoconstriction, inflammation,
XX allergies, asthma, impeded respiration, respiratory distress syndrome
XX (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
XX pulmonary transplantation rejection, pulmonary infections, bronchitis,
XX and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
XX fragments and antisense oligonucleotides used in the exemplification of
XX the present invention
XX Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCGGC 11
Db 1 GGAGGGCGGC 10
RESULT 270
AAF19252
ID AAF19252 standard; DNA; 10 BP.
XX AC AAF19252;
XX 14-MAR-2001 (first entry)
XX Human adenosine A1 receptor polynucleotide fragment #819.
XX

```


KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW Surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO200062736-A2.
 PN
 XX 26-OCT-2000.
 PD
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 XX 06-APR-1999; 99US-0127958P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 PI
 XX WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 PT
 XX Claim 14; Page 118; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors and
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 CC
 XX Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GCGGCGATCG 15
 |||||
 Db 1 GCGGCGATGG 10

RESULT 271
 AAF19198
 ID AAF19198 standard; DNA; 10 BP.
 XX
 AC AAF19198;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #765.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO200062736-A2.
 PN
 XX 26-OCT-2000.
 PD
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 XX 06-APR-1999; 99US-0127958P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 PI
 XX WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 PT
 XX Claim 14; Page 117; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors and
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 CC
 XX Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GCGGCGATCG 15
 |||||
 Db 1 GCGGCGATGG 10

CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 10 BP; 2 A; 2 C; 6 G; 0 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGGCGGCA 12
Db 1 GAGGGCGGCA 10
RESULT 272
AAF43209/C
ID AAF43209 standard; DNA; 10 BP.
XX
AC AAF43209;
XX
DT 23-MAR-2001 (first entry)
XX
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:11348.
XX
KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
OS Saccharomyces cerevisiae.
XX
XX WO200077214-A2.
XX
XX 21-DEC-2000.
XX
XX 14-JUN-2000; 2000WO-US016223.
XX
XX 16-JUN-1999; 99US-00335032.
XX
XX (UYJO) UNIV JOHNS HOPKINS.
XX
XX Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
XX Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
XX Example; Page 355; 419pp; English.
XX
CC The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The

CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF3262 to AAF3267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
SQ Sequence 10 BP; 0 A; 5 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGGCGGCA 12
Db 10 GCGGGCGGCA 1
RESULT 273
AAS98392
ID AAS98392 standard; DNA; 10 BP.
XX
AC AAS98392;
XX
DT 12-MAR-2002 (first entry)
XX
DE Galanin receptor gene GALR1 allele-specific oligonucleotide #104.
XX
KW Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;
KW drug discovery; haplotyping; infectious diarrhoea;
KW growth hormone deficiency; allele-specific oligonucleotide; ss.
XX
OS Homo sapiens.
XX
XX WO200179237-A2.
XX
XX 25-OCT-2001.
XX
XX 16-APR-2001; 2001WO-US012306.
XX
XX 14-APR-2000; 2000US-0197838P.
XX
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;
XX WPI; 2002-066341/09.
XX
XX Genotyping human galanin receptor gene of an individual for determining
PT haplotype of an individual, involves determining the identity of
PT nucleotide pair at specific polymorphic sites for two copies of the gene.
XX
XX Claim 18; Page 16; 99pp; English.
XX
CC The invention relates to genotyping human galanin receptor (GALR1) gene
CC of an individual, involving determining for the two copies of the GALR1
CC gene present in the individual, the identity of the nucleotide pair at
CC one or more polymorphic sites. The method is useful for determining
CC whether an individual has a haplotype or haplotype pairs defined in the
CC specification. This is useful for improving the efficacy and reliability
CC of several steps in the discovery and development of drugs for treating
CC diseases associated with GALR1 activity, e.g., infectious diarrhoea and
CC growth hormone deficiency, to validate GALR1 as a candidate agent for
CC treating a specific condition or disease predicted to be associated with
CC GALR1 activity, and in the design of clinical trials of candidate drugs
CC for treating a specific condition or disease predicted to be associated
CC with GALR1 activity. The method is useful to screen for compounds
CC targeting GALR1 to treat a specific condition or disease associated with
CC GALR1 activity. A GALR1 polymorphic site or variant is useful in studying
CC the expression and function of GALR1, and in expressing GALR1 protein for
CC use in screening for candidate drugs to treat diseases related to GALR1
CC activity. The polymorphic site or variant is useful for studying expression
CC of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs
CC targeted against GALR1 protein, and for studying the effect of the

CC variation on the biological activity of GALR1 as well as on the binding
 CC affinity of candidate drugs targeting GALR1 for the treatment of
 CC infectious diarrhoea and growth hormone insufficiency. AAS98408
 CC represent human GALR1 gene allele-specific oligonucleotides used to
 CC detect GALR1 gene polymorphisms as described in the method of the
 CC invention
 CC
 CC Sequence 10 BP; 1 A; 3 C; 6 G; 0 T; 0 U; 0 Other;
 SQ Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGCGCGCGC 11
 Db 1 GCGCGCGCGC 10
 RESULT 274
 ABQ72321
 ID ABQ72321 standard; DNA; 10 BP.
 XX
 AC ABQ72321;
 CC
 DT 02-SEP-2002 (first entry)
 XX
 DE Human CYP2D6 gene polymorphism detection primer, SEQ ID NO:108.
 XX
 KW Human; cytochrome P450; subfamily IID polypeptide 6; CYP2D6; enzyme;
 KW chromosome 22q13.1; drug metabolism; detoxification; mono-oxygenase;
 KW antiarrhythmic; arrhythmia; adrenoceptor antagonist; hypertension;
 KW tricyclic antidepressant; procainamide; drug induced lupus syndrome;
 KW environmentally linked disease; Parkinson's disease; haplotyping;
 KW genotyping; haplotype; genetic variant; single nucleotide polymorphism;
 KW SNP; drug screening; drug discovery; primer extension; primer; ss.
 OS Homo sapiens.
 XX
 XX WO200238589-A2.
 PN
 XX
 PD 16-MAY-2002.
 XX
 XX 09-NOV-2001; 2001WO-US047396.
 PF
 XX
 PR 09-NOV-2000; 2000US-0247943P.
 XX
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 XX
 PI Anastasio AE, Chew A, Choi JY, Denton RR, Nandabalan K;
 PI Petersen N, Rounds E;
 XX
 DR WPI; 2002-519292/55.
 XX
 XX Novel genetic variants of Cytochrome P450, Subfamily IID, Polypeptide 6
 PT isoenzymes, useful for improving efficiency and reliability in drug
 PT development for treating hypertension, arrhythmias and Parkinson's
 PT disease.
 XX
 XX Claim 17; Page 18; 159pp; English.
 PS
 XX The invention relates to a method for haplotyping the cytochrome P450,
 CC subfamily IID, polypeptide 6 (CYP2D6) gene (ABQ72215, ABQ72364) of an
 CC individual, and also describes 29 novel polymorphic sites within the
 CC human CYP2D6 gene. The CYP2D6 gene is located on chromosome 22q13.1 and
 CC contains 9 exons which encode a 497 amino acid protein (AB09563). CYP2D6
 CC is a mono-oxygenase involved in the detoxification of many drugs and
 CC environmental chemicals. It plays a role in the metabolism of drugs such
 CC as antiarrhythmics, adrenoceptor antagonists and tricyclic
 CC antidepressants, and is also involved in the formation of a metabolite
 CC linked to the drug-induced lupus syndrome observed with procainamide.
 CC Variations in CYP2D6 activity or expression may also influence an
 CC individual's susceptibility to environmentally-linked diseases, and it
 CC has been demonstrated that CYP2D6 activity may be involved in the

CC pathogenesis of Parkinson's disease, with individuals with a less active
 CC form of the enzyme tending to have an earlier onset of this condition.
 CC CYP2D6 nucleic acid sequences are useful in studying the expression and
 CC function of CYP2D6, and in expressing CYP2D6 protein for use in screening
 CC drugs for the treatment of CYP2D6-associated diseases (e.g.,
 CC hypertension, atrial and ventricular arrhythmias, Parkinson's disease,
 CC and drug-induced lupus syndrome) or which are metabolised by CYP2D6.
 CC CYP2D6 nucleic acids and proteins are also useful in studying the effect
 CC of polymorphisms on the biological activity of CYP2D6. Polymorphisms in
 CC the target region may be determined by the use of allele-specific
 CC oligonucleotides (ASOs; ABQ72217-ABQ72303) as probes and primers, and by
 CC primer extension using oligonucleotide primers comprising sequences
 CC ABQ72304-ABQ72361. The method of the invention is useful for haplotyping
 CC the CYP2D6 gene in populations and in individuals, enabling decisions to
 CC be made as to whether CYP2D6 is a likely therapeutic target for a disease
 CC of interest, and to control for genetically-based bias in the design of
 CC drugs that target or are metabolised by CYP2D6. In addition, transgenic
 CC animals comprising a human CYP2D6 gene are useful for studying the
 CC expression of CYP2D6 isoenzymes in vivo, for in vivo screening and testing
 CC of drugs targeted to or metabolised by CYP2D6, and for testing the
 CC efficacy of therapeutic agents and compounds for treating CYP2D6-
 CC associated conditions in a biological system. Sequences ABQ72304-
 CC ABQ72361 represent sequences that are specifically claimed as components
 CC of primers used to detect polymorphisms in the CYP2D6 gene by primer
 CC extension
 XX
 SQ Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGCGCGCGC 11
 Db 1 GCGCGCGCGC 10
 RESULT 275
 ABN88031
 ID ABN88031 standard; DNA; 10 BP.
 XX
 AC ABN88031;
 XX
 XX 12-AUG-2002 (first entry)
 DT
 XX
 DE Human SCYB14 preferred oligonucleotide detection primer SEQ ID NO:30.
 XX
 KW Human; small inducible cytokine subfamily B member 14; SCYB14; SNP;
 KW single nucleotide polymorphism; polymorphic; platelet aggregation;
 KW antiinflammatory; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200229108-A1.
 PN
 XX 11-APR-2002.
 PD
 XX 04-OCT-2001; 2001WO-US031303.
 PF
 XX 04-OCT-2000; 2000US-0238101P.
 PR
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 XX Choi JY, Kazemi A, Russo DP, Sausker EA;
 PI WPI; 2002-315864/35.
 DR
 XX New small inducible cytokine subfamily B (Cys-X-Cys), Member 14 (SCYB14)
 PT gene polymorphic variants, for studying the expression and function of
 PT SCYB14 and screening candidate drugs for treating disorders involving
 PT inflammatory responses.
 XX
 PS Claim 17; Page 14; 73pp; English.

XX The present invention describes genetic variants of the human small
 CC inducible cytokine subfamily B (Cys-X-Cys), Member 14 (BRAX) (SCYB14)
 CC gene. SCYB14 sequences have antiinflammatory activity. The polymorphic
 CC variants are useful in studying the expression and function of SCYB14, in
 CC expressing SCYB14 protein for use in screening for candidate drugs to
 CC treat diseases related to SCYB14 activity, in studying the effect of the
 CC variation on the biological activity of SCYB14, and the binding affinity
 CC of candidate drugs targeting SCYB14 for the treatment of disorders
 CC involving inflammatory responses. Haplotyping methods from the present
 CC invention are useful in validating SCYB14 as a candidate target for
 CC treating a specific condition or disease predicted to be associated with
 CC SCYB14 activity, or in the design of clinical trials of candidate drugs
 CC for treating a specific condition or disease associated with SCYB14
 CC activity. Transgenic animals are useful for studying expression of the
 CC SCYB14 isogenes in vivo, for in vivo screening and testing of drugs
 CC targeted against SCYB14 protein, and for testing the efficacy of
 CC therapeutic agents and compounds for disorders related to platelet
 CC aggregation in a biological system. The present sequence represents a
 CC preferred oligonucleotide detection primer for the human SCYB14 gene
 XX

SQ Sequence 10 BP; 1 A; 3 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11
 Db 1 GCGCGGCGGAC 10

RESULT 276
 AAS95984/C
 ID AAS95984 standard; DNA; 10 BP.
 AC AAS95984;
 XX
 XX 26-FEB-2002 (first entry)
 DT
 XX
 DE Human CALM1 gene allele-specific oligonucleotide #93.
 XX
 KW Calmodulin 1; CALM1; human; single nucleotide polymorphism; SNP;
 KW haplotyping; SCYA3; Alzheimer's disease; drug screening;
 KW calcium-dependent signal transduction; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200179218-A2.
 PN
 XX 25-OCT-2001.
 PD
 XX
 XX 09-APR-2001; 2001WO-US011509.
 PF
 XX 12-APR-2000; 2000US-0196340P.
 PR
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 XX Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;
 PI WPI; 2002-049190/06.
 DR
 XX

XX New calmodulin-1 (CALM-1) isogene polymorphic variants, useful in
 PT expressing CALM1 protein for use in screening for candidate drugs to
 PT treat diseases related to CALM1 activity such as Alzheimer's disease.
 XX
 XX Claim 17; Page 14; 82pp; English.
 PS
 XX The invention relates to an isolated polynucleotide comprising a sequence
 CC selected from a polymorphic variant of calmodulin 1 (CALM1). The
 CC polymorphic variant comprises an CALM1 isogene defined by a haplotype
 CC selected from haplotypes 1-21 given in the specification. The
 CC polymorphisms are useful for studying the biological function of CALM1 as
 XX well as in identifying drugs targeting this protein for the treatment of
 CC a disorder related to its abnormal expression or function. The
 CC polymorphic variants may also be used in screening for compounds
 CC targeting CALM1 to treat a specific condition or disease predicted to be
 CC associated with CALM1 activity. Establishing CALM1 haplotype or haplotype
 CC pair of an individual is useful for improving the efficiency and

CC well as in identifying drugs targeting this protein for the treatment of
 CC a disorder related to its abnormal expression or function. The
 CC polymorphic variants may also be used in screening for compounds
 CC targeting CALM1 to treat a specific condition or disease predicted to be
 CC associated with CALM1 activity. Establishing CALM1 haplotype or haplotype
 CC pair of an individual is useful for improving the efficiency and
 CC reliability of several steps in the discovery and development of drugs
 CC for treating diseases associated with SCYA3 activity, e.g. Alzheimer's
 CC disease and diseases involving defects in calcium-dependent signal
 CC transduction. Haplotyping the CALM1 gene in an individual is also useful
 CC in the design of clinical trials of candidate drugs for treating a
 CC specific condition or disease predicted to be associated with CALM1
 CC activity. AAS95892-AAS96018 represent human CALM1 allele- specific
 CC oligonucleotides and PCR primers of the invention
 XX

SQ Sequence 10 BP; 0 A; 7 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11
 Db 10 GCGCGGAGGC 1

RESULT 277
 AAS95991
 ID AAS95991 standard; DNA; 10 BP.
 XX
 AC AAS95991;
 XX
 XX 26-FEB-2002 (first entry)
 DT
 XX
 DE Human CALM1 gene allele-specific oligonucleotide #100.
 XX
 KW Calmodulin 1; CALM1; human; single nucleotide polymorphism; SNP;
 KW haplotyping; SCYA3; Alzheimer's disease; drug screening;
 KW calcium-dependent signal transduction; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200179218-A2.
 PN
 XX 25-OCT-2001.
 PD
 XX
 XX 09-APR-2001; 2001WO-US011509.
 PF
 XX 12-APR-2000; 2000US-0196340P.
 PR
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 XX Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;
 PI WPI; 2002-049190/06.
 DR
 XX

XX New calmodulin-1 (CALM-1) isogene polymorphic variants, useful in
 PT expressing CALM1 protein for use in screening for candidate drugs to
 PT treat diseases related to CALM1 activity such as Alzheimer's disease.
 XX
 XX Claim 17; Page 14; 82pp; English.

XX The invention relates to an isolated polynucleotide comprising a sequence
 CC selected from a polymorphic variant of calmodulin 1 (CALM1). The
 CC polymorphic variant comprises an CALM1 isogene defined by a haplotype
 CC selected from haplotypes 1-21 given in the specification. The
 CC polymorphisms are useful for studying the biological function of CALM1 as
 CC well as in identifying drugs targeting this protein for the treatment of
 CC a disorder related to its abnormal expression or function. The
 CC polymorphic variants may also be used in screening for compounds
 CC targeting CALM1 to treat a specific condition or disease predicted to be
 CC associated with CALM1 activity. Establishing CALM1 haplotype or haplotype
 CC pair of an individual is useful for improving the efficiency and

CC reliability of several steps in the discovery and development of drugs
 CC for treating diseases associated with SCYA3 activity, e.g. Alzheimer's
 CC disease and diseases involving defects in calcium-dependent signal
 CC transduction. Haplotyping the CALM1 gene in an individual is also useful
 CC in the design of clinical trials of candidate drugs for treating a
 CC specific condition or disease predicted to be associated with CALM1
 CC activity. AAS95892-AAS96018 represent human CALM1 allele- specific
 CC oligonucleotides and PCR primers of the invention
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGCGGCGGC 11
 DB 1 GCGCGGAGGC 10
 RESULT 278
 ABT16423
 ID ABT16423 standard; DNA; 10 BP.
 XX
 AC ABT16423;
 XX
 DT 20-MAR-2003 (first entry)
 XX
 DE Human neurokinin 1 receptor gene polymorphic region SEQ ID NO 4.
 XX
 KW Cytostatic; antiasthmatic; antiinflammatory; cardiact; polymorphic site;
 KW human neurokinin 1 receptor; TACR1; disease phenotype; forensics;
 KW TACR1 ligand mediated disease; asthma; paternity testing; cancer;
 KW inflammation; heart disease; central nervous system; infection; ds.
 XX
 OS Homo sapiens.
 XX
 PN BP1262565-A2.
 XX
 PD 04-DEC-2002.
 XX
 PF 23-MAY-2002; 2002EP-00253662.
 XX
 PR 25-MAY-2001; 2001US-0293425P.
 XX
 PA (PFIZ) PFIZER PROD INC.
 XX
 PI Affurttit JP, Nelson DL, Seymour AB, Webb SM;
 XX
 DR WPI; 2003-150228/15.
 XX
 PT Novel nucleic acid segment from human neurokinin 1 receptor, including
 PT polymorphic sites for diagnosing and treating asthma, and in forensics,
 PT paternity testing, and genetic mapping of the traits.
 XX
 PS Claim 1; Page 25; 27pp; English.
 XX
 CC The invention relates to a nucleic acid segment from the human neurokinin
 CC 1 receptor (TACR1) gene of 10-100 nucleotides comprising a fragment
 CC having a polymorphic site or a complement of the fragment. The TACR1
 CC segment is useful for analysing a nucleic acid, by obtaining the nucleic
 CC acid from an individual, and determining the base occupying any one of
 CC the polymorphic sites in the segment. The nucleic acid is obtained from
 CC several individuals, and the base occupying one of the polymorphic sites
 CC is determined in each of the individuals, and further involves testing
 CC each of the individuals for the presence of a disease phenotype, and
 CC correlating the presence with the base. The TACR1 segment is useful for
 CC diagnosing and treating TACR1 ligand mediated diseases, such as asthma.
 CC The TACR1 segment is also useful in forensics, paternity testing,
 CC correlating polymorphisms with phenotypic traits, and genetic mapping of
 CC phenotypic traits. The TACR1 segment is useful in diagnosing and
 CC monitoring of diseases such as cancer, inflammation, heart disease,
 CC diseases of central nervous system, and susceptibility to infection to

CC microorganisms. The TACR1 segment is also useful in the manufacture of a
 CC medicament for the treatment of the diseases. This polynucleotide
 CC sequence represents a polymorphic region of the human neurokinin 1
 CC receptor (TACR1) gene of the invention
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 5 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGCGGCGCA 12
 DB 1 GCGCGGCGCA 10
 RESULT 279
 AAD58332/c
 ID AAD58332 standard; DNA; 10 BP.
 XX
 AC AAD58332;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE G6 primer used in arbitrarily-primed PCR (AP-PCR) analysis.
 XX
 KW Cell proliferative disorder; central nervous system disease; infection;
 KW gastrointestinal tract disease; respiratory system disease; inflammation;
 KW sexual malfunction; ulcerative colitis; psychotic disorder; hypertension;
 KW cardiovascular disorder; immune disorder; Hodgkin's disease; drug abuse;
 KW behavioural problem; metabolic disorder; Huntington's disease; dementia;
 KW skin disorder; cancer; lesion; autism; therapy; arbitrarily-primed PCR;
 KW AP-PCR; primer; ss.
 XX
 OS Unidentified.
 XX
 PN WO2003064701-A2.
 XX
 PD 07-AUG-2003.
 XX
 PF 30-JAN-2003; 2003WO-US003000.
 XX
 PR 30-JAN-2002; 2002US-0352944P.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Sledziewski A, Schweikhardt RG;
 XX
 DR WPI; 2003-618367/58.
 XX
 PT Identifying a reliable diagnostic, prognostic or staging marker for
 PT phenotypic conditions characterized by altered DNA methylation, e.g.,
 PT cancer, comprises obtaining a set of at least two biological samples in
 PT each case having genomic DNA.
 XX
 PS Example 1; Page 43; 87pp; English.
 XX
 CC The invention relates to a method for identifying a reliable diagnostic,
 CC prognostic or staging marker for phenotypic conditions characterised by
 CC altered DNA methylation. The method involves obtaining a set of at least
 CC two genomic DNA samples, identifying primary differentially methylated
 CC CpG dinucleotide sequence positions, selecting a primary differentially
 CC methylated CpG dinucleotide sequence position and confirming the class-
 CC distinguishable methylation status of the selected sequence position. The
 CC method is useful for identifying a reliable diagnostic, prognostic or
 CC staging marker for phenotypic conditions characterised by altered DNA
 CC methylation e.g cell proliferative disorders, metabolic disorders,
 CC central nervous system disorders, immune disorders, cardiovascular
 CC disorders e.g. hypertension, disease of the respiratory system, sexual
 CC malfunction, dementia, disease of the gastrointestinal tract, skin
 CC disorders, lesions, inflammation, infection, drug abuse, behavioural
 CC problems, psychotic disorders, Hodgkin's disease, cancer, autism,
 CC ulcerative colitis or Huntington's disease. The method is also useful for

CC treating the above mentioned disorders. The present sequence is a primer
 CC used in arbitrarily-primed PCR (AP-PCR) analysis. This sequence is used
 CC in the exemplification of the invention

XX
 SQ Sequence 10 BP; 1 A; 6 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4 CGGGCGGCAT 13
 |||||
 Db 10 CGGGCGGCAT 1

RESULT 280

ABZ94892
 ID ABZ94892 standard; DNA; 10 BP.

XX
 AC ABZ94892;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human adenosine A1 receptor antisense fragment no.755.

XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX
 OS Homo sapiens.

XX
 PN WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX
 PI Miller S, Tang L, Shahabuddin S;

XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 10134; 872pp; English.

XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 10 BP; 2 A; 2 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGGCGGCA 12
 |||||
 Db 1 GAGGGCGGCA 10

RESULT 281

ABZ94946

ID ABZ94946 standard; DNA; 10 BP.

XX
 AC ABZ94946;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human adenosine A1 receptor antisense fragment no.809.

XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX
 OS Homo sapiens.

XX
 PN WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX
 PI Miller S, Tang L, Shahabuddin S;

XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 10188; 872pp; English.

XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCATCG 15
|||
Db 1 GCGGCATCG 10

RESULT 282

ABZ94872
ID ABZ94872 standard; DNA; 10 BP.

XX
AC ABZ94872;

XX 17-OCT-2003 (first entry)

XX Human adenosine A1 receptor antisense fragment no.735.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiqunone.

XX Disclosure; SEQ ID NO 10114; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiqunone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiqunone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
|||
Db 1 GCGGGCGGC 10

RESULT 283

ABD18720
ID ABD18720 standard; DNA; 10 BP.

XX
AC ABD18720;

XX 29-JUL-2004 (first entry)

XX Human adenosine A1 receptor oligonucleotide fragment 735.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

XX Claim 15; SEQ ID NO 10114; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGCGC 11
 || |||||
 Db 1 GCGGGCGCGC 10
 RESULT 284
 ABD18740
 ID ABD18740 standard; DNA; 10 BP.
 XX
 AC ABD18740;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human adenosine A1 receptor oligonucleotide fragment 755.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 DR WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 FT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 10134; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGGCGCGCA 12
 || |||||
 Db 1 GAGGGCGCGCA 10
 RESULT 285
 ABD18794
 ID ABD18794 standard; DNA; 10 BP.
 XX
 AC ABD18794;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human adenosine A1 receptor oligonucleotide fragment 809.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX

DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 10188; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
 XX
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GCGGCGCATCG 15
 Db |||||
 1 GCGGCGCATCG 10
 RESULT 286
 ADO26312
 ID ADO26312 standard; DNA; 10 BP.
 AC
 AC ADO26312;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human chondromedin protein related oligonucleotide #24.
 XX
 KW human; osteopathic; antiarthritic; antirheumatic; chondromedin; marker;
 KW ds.
 XX
 OS Unidentified.
 XX
 XX WO2004039974-A1.
 PN
 XX 13-MAY-2004.
 PD
 XX 30-OCT-2003; 2003WO-JP013919.
 PF
 XX 30-OCT-2002; 2002JP-00315573.

PR 28-NOV-2002; 2002JP-00345601.
 XX (TAKE) TAKEDA CHEM IND LTD.
 PA
 XX Watanabe T, Inazuka M;
 PI
 XX WPI; 2004-390322/36.
 DR
 XX Novel chondromedin protein or salts, useful as diagnostic markers for
 PT osteitis, arthritis and for screening compounds useful in treating bone
 PT and articular diseases such as fracture, osteoarthritis, rheumatoid
 PT arthritis.
 XX
 XX Example 3; Page 75; 107pp; Japanese.
 PS
 CC The present invention relates to mature and precursor chondromedin
 CC protein sequences. Also provided are the coding sequences. The sequences
 CC are useful for preventing and/or treating bone and articular diseases
 CC such as fracture, chondrodystrophy, osteodystrophy, osteoporosis,
 CC osteoarthritis, rheumatoid arthritis, synovitis and metabolic arthritis,
 CC and as markers in the diagnosis of the above conditions. The present
 CC sequence is a polynucleotide sequence shown in the exemplification of the
 CC invention.
 XX
 SQ Sequence 10 BP; 0 A; 4 C; 6 G; 0 T; 0 U; 0 Other;
 XX
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGCGCGGC 11
 Db |||||
 1 GCGGCGCGGC 10
 RESULT 287
 ADU19748/c
 ID ADU19748 standard; DNA; 10 BP.
 XX
 AC ADU19748;
 XX
 DT 13-JAN-2005 (first entry)
 XX
 DE Hypoxia-related tumorigenesis-related SAGE tag #1539.
 XX
 XX screening; hypoxia-related tumorigenesis;
 KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.
 XX
 OS Unidentified.
 XX
 XX WO2004092198-A2.
 PN
 XX 28-OCT-2004.
 PD
 XX 09-APR-2004; 2004WO-US011087.
 PF
 XX 09-APR-2003; 2003US-0461712P.
 PR
 XX (GENZ) GENZYME CORP.
 PA
 XX Nacht M;
 PI
 XX WPI; 2004-758333/74.
 DR
 XX Identifying agents that alter biological activity of a polypeptide
 PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
 PT comprises contacting an agent with a target cell and monitoring activity
 PT of expressed product.
 XX
 PS Disclosure; Page 86; 100pp; English.
 XX
 CC The invention comprises a method of screening for candidate agents
 CC capable of altering the biological activity of a protein encoded by a

CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
 CC invention involves: contacting a test agent with a target cell expressing
 CC the nucleotide, and monitoring the activity of the expressed protein
 CC product; if the test agent modifies the activity of the expressed protein
 CC then this is a candidate agent. The method of the invention is useful for
 CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
 CC or treating tumours. The present DNA sequence represents a SAGE tag that
 CC was used in the exemplification of the invention.

XX Sequence 10 BP; 0 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
 Db 10 GGCGGGAGGC 1

RESULT 286
 ADU18460/c

ID ADU18460 standard; DNA; 10 BP.

XX AC ADU18460;

XX DT 13-JAN-2005 (first entry)

XX DE Hypoxia-related tumorigenesis-related SAGE tag #251.

XX KW screening; hypoxia-related tumorigenesis;

XX KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.

XX OS Unidentified.

PN WO2004092198-A2.

XX PD 28-OCT-2004.

XX PF 09-APR-2004; 2004WO-US011087.

XX PR 09-APR-2003; 2003US-0461712P.

XX PA (GENZ) GENZYME CORP.

XX PI Nacht M;

XX DR WPI; 2004-758333/74.

XX PT Identifying agents that alter biological activity of a polypeptide
 PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
 PT comprises contacting an agent with a target cell and monitoring activity
 PT of expressed product.

XX PS Disclosure; Page 61; 100pp; English.

XX CC The invention comprises a method of screening for candidate agents
 CC capable of altering the biological activity of a protein encoded by a
 CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
 CC invention involves: contacting a test agent with a target cell expressing
 CC the nucleotide, and monitoring the activity of the expressed protein
 CC product; if the test agent modifies the activity of the expressed protein
 CC then this is a candidate agent. The method of the invention is useful for
 CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
 CC or treating tumours. The present DNA sequence represents a SAGE tag that
 CC was used in the exemplification of the invention.

XX Sequence 10 BP; 0 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
 Db 10 GGCGGGAGGC 1

RESULT 289
 ADU20325/c

ID ADU20325 standard; DNA; 10 BP.

XX AC ADU20325;

XX DT 13-JAN-2005 (first entry)

XX DE Hypoxia-related tumorigenesis-related SAGE tag #2116.

XX KW screening; hypoxia-related tumorigenesis;

XX KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.

XX OS Unidentified.

PN WO2004092198-A2.

XX PD 28-OCT-2004.

XX PF 09-APR-2004; 2004WO-US011087.

XX PR 09-APR-2003; 2003US-0461712P.

XX PA (GENZ) GENZYME CORP.

XX PI Nacht M;

XX DR WPI; 2004-758333/74.

XX PT Identifying agents that alter biological activity of a polypeptide
 PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
 PT comprises contacting an agent with a target cell and monitoring activity
 PT of expressed product.

XX PS Disclosure; Page 100; 100pp; English.

XX CC The invention comprises a method of screening for candidate agents
 CC capable of altering the biological activity of a protein encoded by a
 CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
 CC invention involves: contacting a test agent with a target cell expressing
 CC the nucleotide, and monitoring the activity of the expressed protein
 CC product; if the test agent modifies the activity of the expressed protein
 CC then this is a candidate agent. The method of the invention is useful for
 CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
 CC or treating tumours. The present DNA sequence represents a SAGE tag that
 CC was used in the exemplification of the invention.

XX Sequence 10 BP; 0 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
 Db 10 GGCGGGAGGC 1

RESULT 290
 ADU78419

ID ADU78419 standard; DNA; 10 BP.

XX AC ADU78419;

XX DT 10-FEB-2005 (first entry)

XX DE Rice oligonucleotide #33.

Gene expression; ss.
 Oryza sativa.
 Synthetic.
 WO2004099445-A1.
 18-NOV-2004.
 09-MAY-2003; 2003WO-JP005840.
 09-MAY-2003; 2003WO-JP005840.
 (IWAT-) IWATE PREFECTURAL GOVERNMENT.
 (KAHL/) KAHL G.
 (WINT/) WINTER P.
 (KRUE/) KRUEGER D.
 (REIC/) REICH S.
 Kahl G, Winter P, Krueger D, Reich S, Matsumura H, Terauchi R;
 WPI; 2004-821686/81.
 Use of type III restriction enzyme to isolate from cDNA of an expressed gene, a tag comprising more than 25 nucleotides and capable of identifying the expressed gene.
 Example 1; Page 21; 53pp; English.
 The invention relates to the use of a type III restriction enzyme to isolate from cDNA of an expressed gene, a tag comprising more than 25 nucleotides and capable of identifying the expressed gene, where the 3' end of the tag is defined by a cleavage site of the type III restriction enzyme and the 5' end of the tag is defined by the cleavage site of another restriction enzyme that is closest to the 3' end of the cDNA of the expressed gene. The invention also relates to a ditag-oligonucleotide comprising two tags each of which is derived from a different expressed gene, where each tag comprises more than 25 nucleotides and is capable of identifying an expressed gene, where the 3' end of the tag is defined by a cleavage site of the type III restriction enzyme and the 5' end of the tag is defined by the cleavage site of another restriction enzyme that is closest to the 3' end of the cDNA of the expressed gene, a polynucleotide comprising two ditag oligonucleotides, and a gene expression analysis method comprising synthesizing a cDNA pool from mRNA of expressed genes using a primer comprising oligo-dT and a recognition sequence of a type III restriction enzyme, followed by digestion of the cDNA pool with another restriction enzyme, purifying fragments comprising a poly A sequence from the cDNA pool, and ligating the fragments to either linker-A or linker-B, both of which comprise the recognition sequence of the type III restriction enzyme, digesting the above fragments with the type III restriction enzyme, and digesting the resulting fragment comprising linker-A to the resulting fragment comprising linker-B after performing a 3'-filling reaction, digesting the ligated fragments with the other restriction enzyme to cleave off the linker sequence, and therefore obtaining a ditag-oligonucleotide comprising two tags of more than 25 nucleotides and capable of identifying the expressed gene, ligating the ditag-oligonucleotides to produce a polynucleotide, analyzing the polynucleotide sequences of the polynucleotide, and quantifying the expression level of an expressed gene based on the number of tags corresponding to the expressed gene included in the polynucleotide. The polynucleotide is useful for gene expression analysis which involves analyzing the polynucleotide sequence and quantifying the expression level of an expressed gene based on the number of tags corresponding to the expressed gene included in the polynucleotide. The isolated tag allows accurate quantitative gene expression analysis and rapid gene expression profiling in any organism for which no expressed sequence tag (EST) database is available. This sequence represents a rice oligonucleotide used in the method of the invention.
 Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGCGGCA 12
 Db 1 GCGGCGGCA 10
 RESULT 291
 ADM10561/c
 ID ADM10561 standard; DNA; 10 BP.
 XX
 AC ADM10561;
 XX
 DT 24-MAR-2005 (first entry)
 XX
 DE Human genomic DNA fragment arbitrarily-primed PCR primer, G6.
 XX
 KW colorectal tumor; CpG methylation detection; cytostatic; gene therapy;
 KW proliferative disorder; carcinoma; PCR; primer; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN US2004265833-A1.
 XX
 PD 30-DEC-2004.
 XX
 PF 23-JUN-2003; 2003US-00602494.
 XX
 PR 23-JUN-2003; 2003US-00602494.
 XX
 PA (LOFT/) LOFTON-DAY C.
 PA (SLED/) SLEDZIEWSKI A.
 PA (THOM/) THOMAS J.
 PA (DAYR/) DAY R W.
 PA (TONN/) TONNES-PRIDDY L.
 PA (CARD/) CARDON K.
 XX
 PI Lofton-Day C, Sledziewski A, Thomas J, Day RW, Tonnes-Priddy L;
 PI Cardon K;
 XX
 DR WPI; 2005-089566/10.
 XX
 PT Detecting and distinguishing colorectal cell proliferative disorders by
 PT contacting genomic DNA of biological sample with reagent that
 PT distinguishes methylated and non-methylated CpG dinucleotides within
 PT target sequence of genomic DNA.
 XX
 PS Example 1; SEQ ID NO 366; 23pp; English.
 XX
 CC The invention relates to a novel method for detecting and distinguishing
 CC between, or among, colorectal cell proliferative disorders. The method
 CC involves contacting genomic DNA of a biological sample obtained from the
 CC subject with one or more reagent(s), or a series of reagents that
 CC distinguishes between methylated and non-methylated CpG dinucleotides
 CC within a target sequence of the genomic DNA. The invention further
 CC comprises: a nucleic acid comprising a sequence of 18 or more contiguous
 CC nucleotides of a treated genomic DNA sequence chosen from any one of 284
 CC fully defined nucleotide sequences, whose sequence listing is not
 CC provided in the specification, and their complementary sequences, where
 CC the contiguous sequence has one or more CpG, TPA, or CpA dinucleotide,
 CC and the treatment is suitable to convert one or more of the unmethylated
 CC cytosine base(s) of the genomic DNA sequence initially to uracil or
 CC another base that is detectably dissimilar to cytosine in terms of
 CC hybridization; an oligomer or peptide nucleic acid (PNA)-oligomer,
 CC comprising 9 or more contiguous nucleotides that is complementary to or
 CC hybridizes under moderately stringent or stringent conditions to one of
 CC the 284 DNA sequences and their complementary sequences provided in the
 CC source document, which is treated; a set of oligomers comprising two or
 CC more of the oligomer of PNA-oligomer; an array of oligomers; and a kit
 CC for carrying out the above methods. The method and its novel compositions
 CC have cytostatic activity. The polynucleotide sequence may be used in gene
 CC therapy. The above methods are useful for detecting and distinguishing

CC between, or among, colorectal cell proliferative disorders chosen from
 CC colorectal carcinoma, colon adenomas and colon polyps, in a biological
 CC sample, such as histological slides, biopsies, paraffin embedded tissue,
 CC bodily fluids, stool, blood, serum, plasma and their combinations. The
 CC oligomer array is useful as a probe for detecting one or more of the
 CC cytosine methylation state, or single nucleotide polymorphisms within the
 CC genomic DNA or their complementary sequences. The polynucleotides of the
 CC invention are useful for classifying, distinguishing between, or among,
 CC diagnosing or determining the predisposition for colorectal cell
 CC proliferative disorders, or for the therapy of colorectal cell
 CC proliferative disorders. This polynucleotide sequence represents a primer
 CC used in the exemplification of the invention.

XX
 SQ Sequence 10 BP; 1 A; 6 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 10;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGGCGGGCAT 13
 |||||
 DB 10 CGGCGGGCAT 1

RESULT 292
 AEA52335/C
 ID AEA52335 standard; DNA; 10 BP.

XX AC AEA52335;

XX 25-AUG-2005 (first entry)

XX Prostate cancer gene PCR primer SEQ ID NO 938.

DE gene expression; cell proliferation; hyperproliferation; cytostatic;
 KW neoplasm; PCR; primer; ss.

XX Homo sapiens.

XX WO2005054517-A2.

XX 16-JUN-2005.

XX 01-DEC-2004; 2004WO-US040289.

XX 01-DEC-2003; 2003EP-00090414.

PR 10-FEB-2004; 2004EP-00090040.

PR 10-MAY-2004; 2004EP-00090187.

PR 21-JUL-2004; 2004EP-00090292.

XX (EPIG-) EPIGENOMICS AG.

XX Day KJ, Cottrell S, Distler J, Morotti A, Yamamura S, Dekker S;
 PI Ocamp Y, Devos T;

XX WPI; 2005-425434/43.

XX Detecting and/or differentiating prostate cell proliferative disorders in
 PT a subject by contacting genomic with reagent(s) that distinguishes
 PT between methylated and non-methylated CpG dinucleotides in target nucleic
 PT acids.

PS Example 1; SEQ ID NO 938; 164pp; English.

XX The invention describes a method of detecting and/or differentiating
 CC between prostate cell proliferative disorders in a subject comprising
 CC contacting genomic DNA isolated from a biological sample with at least
 CC one reagent, or series of reagents that distinguishes between methylated
 CC and non-methylated CpG dinucleotides within one or a combination of
 CC target nucleic acids e.g. HISTONE H4. Also described are: a treated
 CC nucleic acid derived from SEQ ID NO: 1-59, 1017-1028, 1116, 1171, where
 CC the treatment converts at least one unmethylated cytosine base of the
 CC genomic DNA sequence to uracil or another base that is detectable

CC dissimilar to cytosine in terms of hybridization; a nucleic acid
 CC comprising at least 16 contiguous nucleotides of a treated genomic DNA
 CC sequence selected from SEQ ID NO: 60-295, 1029-1076, 1117-1120, 1172-1175
 CC and sequences complementary to them; an oligomer comprising a sequence of
 CC at least 9 contiguous nucleotides that is complementary to, or hybridizes
 CC under moderately stringent or stringent conditions to a treated genomic
 CC DNA sequence above; a set of oligomers comprising at least two
 CC oligonucleotides as above; and a kit useful for detecting and/or
 CC distinguishing between or among prostate cell proliferative disorder of a
 CC subject comprising at least one of a bisulfite reagent, or a methylation-
 CC sensitive restriction enzyme, and at least one nucleic acid molecule or
 CC peptide nucleic acid molecule comprising a contiguous sequence at least 9
 CC nucleotides that is complementary to, or hybridizes under moderately
 CC stringent or stringent conditions to a sequence selected from SEQ ID NO:
 CC 60-295, 1029-1076, 1117-1120, 1172-1175 and their complements. The
 CC method, nucleic acid, oligomer, set of oligonucleotide, and kit are
 CC useful for detecting and/or differentiating between or among cell
 CC proliferative disorders. This sequence represents a primer used to
 CC analyze methylation status of genes encoding a prostate cell
 CC proliferation associated protein.

XX
 SQ Sequence 10 BP; 1 A; 6 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 10;

Best Local Similarity 90.0%; Pred. No. 1.7e+02;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGGCGGGCAT 13
 |||||
 DB 10 CGGCGGGCAT 1

RESULT 293

AA90193/C

XX ID AA90193 standard; DNA; 11 BP.

XX AC AA90193;

XX 27-AUG-2003 (revised)

DT 25-MAR-2003 (revised)

DT 31-OCT-2002 (revised)

DT 01-NOV-1989 (first entry)

XX Portion of substituted pertussis toxin S1 subunit gene.

XX Primer; mutant 25; pertussis toxin S1 subunit gene.

KW Bordetella pertussis.

XX EP322533-A.

XX 05-JUL-1989.

XX 25-OCT-1988; 88EP-00117742.

XX 02-NOV-1987; 87IT-00022481.

XX (ISTS) IST SIEROTERAPEUTICO & VACCINOGENO.

PA (SCIQ) SCIPER SA.

XX Pizza M, Rappuloi R, Bartoloni A;

XX WPI; 1989-193915/27.

XX Modified pertussis toxin polypeptide(s) - having aminoacid substitution
 PT in sl region for prepn. of anti:pertussis vaccine of reduced toxicity.
 XX Disclosure; Page 4; 15pp; English.
 XX This is the sequence of bases 910-920 of pertussis toxin S1 subunit gene
 CC after the primer of AA90192 has been used to substitute Gly 99 with Glu
 CC See also AA90188-91, and AA90194-207. (Updated on 31-OCT-2002 to add
 CC missing OS field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated

CC on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct
 CC OS field.)

SQ Sequence 11 BP; 3 A; 4 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 7 GCGGCATCGT 16
 |||||
 Db 11 GCGGCTTCGT 2

RESULT 294

AAV68363/c
 ID AAV68363 standard; DNA; 11 BP.

XX AC AAV68363;
 XX 10-MAR-1999 (first entry)

DT Adapter primer oligonucleotide #2 for CAG repeat analysis.
 DE CAG repeat; human; genome analysis; adapter primer; medical diagnostic;
 KW nucleic acid analysis; variation assessment; neurological disease;
 KW Huntington's chorea; PCR suppression; ss.
 XX Synthetic.
 OS WO9849345-A1.
 XX 05-NOV-1998.
 XX 29-APR-1998; 98WO-US008616.
 XX 29-APR-1997; 97US-0045078P.
 XX (UYBO-) UNIV BOSTON.
 PA Smith CL;
 PI WPI; 1998-594983/50.

XX Analysing nucleic acid samples - using amplification primers which
 PT contain CAG or CTG tri-nucleotide repeats for differential display of
 PT samples from different sources.
 XX Example; Page 31; 44pp; English.

XX This sequence represents an adapter primer oligonucleotide. It was used
 CC to isolate CAG repeat containing sequences from the human genome to test
 CC the method of the invention. The method is for analysing nucleic acids in
 CC a sample, and comprises: (a) providing a sample containing nucleic acids,
 CC a first oligonucleotide primer comprising a CTG repeat, a second
 CC oligonucleotide primer comprising a CAG repeat and a polymerase and PCR
 CC reagents; (b) preparing said nucleic acid so that it is amplifiable; (c)
 CC amplifying the nucleic acid with the first and second primers; and (d)
 CC detecting the amplified product. The method is used to distinguish
 CC between the expression of genes in two or more biological samples, e.g.
 CC body fluids, cells, solid tissue or solid and liquid foods. It can be
 CC used in medical diagnostics, e.g. to differentiate between normal and
 CC diseased tissue or to assess the variation within monozygotic twin pairs.
 CC The method allows the isolation and analysis of genome subsets containing
 CC CAG repeats which are known to be important in a number of neurological
 CC diseases including Huntington's chorea. The method uses PCR suppression,
 CC in which only fragments which contain a target repeat are efficiently
 CC amplified. This allows accurate identification of differentially
 CC expressed genes in various cell types. Genome complexity is reduced by
 CC the new method which targets genomic subsets containing CAG repeats

XX Sequence 11 BP; 1 A; 7 C; 2 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CGGCGGCGG 10
 |||||
 Db 11 CGGAGGCGG 2

RESULT 295

AAV47214
 ID AAV47214 standard; DNA; 11 BP.

XX AC AAV47214;
 XX 10-NOV-1998 (first entry)

DT Antisense oligonucleotide 714, targeting adenosine A1 receptor.
 DE Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX Synthetic.
 OS Homo sapiens.

XX Key Location/Qualifiers
 FT modified_base 1..11
 FT /*tag= a
 FT /notes= "contains phosphorothioate internucleotide
 FT linkages"
 XX WO9823294-A1.
 XX 04-JUN-1998.
 XX 26-NOV-1997; 97WO-US022017.
 XX 26-NOV-1996; 96US-00757024.
 XX (UYEC-) UNIV EAST CAROLINA.
 XX Nyce JW;

XX WPI; 1998-322464/28.
 XX Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX Claim 12; Page 8-24; 47pp; English.

XX Sequences AAV4501-VA7446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis

XX Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;

```
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GCGCGCGCGC 11
Db 2 GCGCGCGCGC 11
RESULT 296
AAV47309
ID AAV47309 standard; DNA; 11 BP.
XX
AC AAV47309;
XX
DT 10-NOV-1998 (first entry)
XX
DE Antisense oligonucleotide 809, targeting adenosine A1 receptor.
XX
KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
KW allergy; emphysema; cystic fibrosis; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..11
FT FT /tag= a
FT FT /note= "contains phosphorothioate internucleotide
XX linkages"
XX
PW W09823294-A1.
XX
XX 04-JUN-1998.
XX
XX 26-NOV-1997; 97WO-US022017.
XX
XX 26-NOV-1996; 96US-00757024.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW;
XX
XX WPI; 1998-322464/28.
XX
PT Treating respiratory disease with antisense sequences directed against
PT adenosine or bradykinin receptors - with localised delivery to the
PT respiratory system, suitable for long term treatment of asthma, adult
PT respiratory distress syndrome etc.
XX
PS Claim 12; Page 8-24; 47pp; English.
XX
CC Sequences AAV46501-VA7446 are anti-sense oligonucleotides that target the
CC human adenosine A1 receptor, the design of which required the secondary
CC structure of this targets mRNA. The adenosine receptor mRNA secondary
CC structure was both analysed and used to construct antisense
CC oligonucleotides containing a phosphorothioate backbone. Once the
CC antisense molecules are created they can be used to target their
CC predetermined target, thus causing the gene product to decrease. The
CC antisense oligonucleotides were targeted to specific mRNA regions
CC containing either a junction between the intron and exon, or where they
CC may overlap the initiation codon. The receptor is a member of the G-
CC protein coupled family of cell surface receptors that have 7-
CC transmembrane segments. These oligonucleotides can be used to treat or
CC prevent conditions associated with bronchoconstriction and/or lung
CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
CC allergy, emphysema and cystic fibrosis
XX
SQ Sequence 11 BP; 1 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 6 GCGCGCATCG 15
Db 1 GCGCGCATGG 10
RESULT 297
AAV76507/c
ID AAV76507 standard; DNA; 11 BP.
XX
AC AAV76507;
XX
DT 06-AUG-1999 (first entry)
XX
DE WISP PCR primer SEQ ID NO:44.
XX
KW WNT-1 induced secreted protein; WISP-1; WISP-2; WISP-3; CTGF; tumour;
KW connective tissue growth factor; cancer; melanoma; arteriosclerosis;
KW leukaemia; lymphoid malignancy; haematopoiesis-related disorder;
KW tissue-growth disorder; skin disorder; desmoplasia; fibrotic lesion;
KW kidney disorder; bone-related disorder; osteoporosis; trauma; burn;
KW connective tissue disorder; catabolic state; inflammation;
KW testicular-related disorder; angiogenesis; immunological disorder; ss.
XX
OS Synthetic.
XX
PW W09921998-A1.
XX
XX 06-MAY-1999.
XX
XX 29-OCT-1998; 98WO-US022991.
XX
XX 29-OCT-1997; 97US-0063704P.
XX
XX 03-FEB-1998; 98US-0073612P.
XX
XX 14-APR-1998; 98US-0081695P.
XX
XX (GETH ) GENENTECH INC.
XX
XX Botstein DA, Cohen RL, Gurney AL, Hillan K, Lawrence DA;
XX Levine AJ, Pennica D, Roy MA, Goddard A, Wood WI;
XX WPI; 1999-337420/28.
XX
XX New isolated Wnt-1 induced secreted polypeptides, WISP-1, 2 and 3.
XX
XX Example 1; Page 201; 284pp; English.
XX
CC The present invention describes Wnt-1 induced secreted polypeptides, WISP
CC -1, 2 and 3. The novel WISP polypeptides, designated WISP-1, WISP-2 and
CC WISP-3 have homology to connective tissue growth factor (CTGF). Products
CC from the present invention can be used to treat WISP-related disorders
CC such as breast, ovarian, and colon cancer or melanoma. The products can
CC be used to treat arteriosclerosis. The products can also be used to treat
CC other diseases e.g. benign and malignant tumours, leukaemia and lymphoid
CC malignancies, neuronal, glial, astrocytal, hypothalamic and other
CC glandular, macrophagal, epithelial, stromal, and blastocoeleic disorders,
CC haematopoiesis-related disorders, tissue-growth disorders, skin
CC disorders, desmoplasia, fibrotic lesions, kidney disorders, bone-related
CC disorders such as osteoporosis, trauma such as burns, incisions, and
CC other wounds, connective tissue disorders, catabolic states, testicular-
CC related disorders, and inflammatory, angiogenic and immunologic disorders
CC including arteriosclerosis. The products can also be used for detection
CC and diagnosis especially of individuals with neoplastic cell growth or
CC proliferation. The products can be used in the production of transgenic
CC or knock-out animals. Antibodies can be used to induce death in WISP-1, 2
CC or 3 overexpressing cells
XX
SQ Sequence 11 BP; 1 A; 7 C; 2 G; 1 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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QY 1 CGCGGCGCGG 10

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Db      11 CGAGGCGCG 2
      ||| |||||
RESULT 298
AAX53686
ID AAX53686 standard; DNA; 11 BP.
XX
AC AAX53686;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
PI WPI; 1999-229400/19.
XX
DR New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 40; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 11 BP; 1 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      6 GCGGCGCATCG 15
      ||||| |
Db      1 GCGGCGCATCG 10
      ||||| |
RESULT 299
AAX53591
ID AAX53591 standard; DNA; 11 BP.
XX
AC AAX53591;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
PI WPI; 1999-229400/19.
XX
DR New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 38; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 11;

```

Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGCGGC 11
|| |||||

Db 2 GGAGGCGGC 11

RESULT 300

AAA33129
ID AAA333129 standard; DNA; 11 BP.

XX

AC AAA33129;

XX 28-JUL-2000 (first entry)

XX Low adenosine antisense oligonucleotide SEQ ID NO:818.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

XX WO200009525-A2.

XX 24-FEB-2000.

XX 03-AUG-1999; 99WO-US017712.

XX 03-AUG-1998; 98US-0095212P.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 2000-205971/18.

XX New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.

XX Claim 18; Page 368; 1343pp; English.

XX The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation.
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impaired respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC AAA33992) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match

CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX Sequence 11 BP; 1 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;

Best Local Similarity 90.0%; Pred. No. 1.9e+02;

Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATCG 15

Db 1 GGCGGCATCG 10

RESULT 301

AAA33034

ID AAA33034 standard; DNA; 11 BP.

XX

AC AAA33034;

XX 28-JUL-2000 (first entry)

XX Low adenosine antisense oligonucleotide SEQ ID NO:723.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

XX WO200009525-A2.

XX 24-FEB-2000.

XX 03-AUG-1999; 99WO-US017712.

XX 03-AUG-1998; 98US-0095212P.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 2000-205971/18.

XX New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.

XX Claim 18; Page 357; 1343pp; English.

XX The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation.
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impaired respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the

CC nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to CC AAA33992) are specifically claimed QNs from the present invention. N.B. CC Sequences given in the disclosure of the present invention do not match CC up with their corresponding SEQ ID NO: sequences given in the sequence CC listing

XX Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
DB 2 GCGGGCGGC 11

RESULT 302
AAA03393
ID AAA03393 standard; DNA; 11 BP.
XX
AC AAA03393;
XX
DT 19-MAY-2000 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:677.
XX
KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
KW endotoxin release; ARDS; acute respiratory distress syndrome;
KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
KW chronic obstructive pulmonary disease; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO963938-A2.
XX
PD 16-DEC-1999.
XX
PF 08-JUN-1999; 99WO-US012775.
XX
PR 08-JUN-1998; 98US-0088501P.
PR 09-JUN-1998; 98US-00093972.
PR 09-JUN-1998; 98US-0088657P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Hill JL;
XX
DR WPI; 2000-116433/10.
XX
PT Novel composition for treating or preventing e.g. cardiopulmonary and renal injury.
XX
PS Claim 17; Page 34; 252pp; English.

CC The present invention describes a pharmaceutical composition, comprising CC at least one agent (I) that prevents, alleviates and/or inhibits CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure. CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide CC (Ib), containing less than 15% adenosine (A), that is antisense to target CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3' CC ends or segments between coding and non-coding sequences), or to all CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at CC least no agonist activity at this receptor). (I) may be a mixture of (Ia) CC and (Ib), and optionally also contains one or more surfactants. The

CC compositions are used to prevent, alleviate and/or treat adenosine CC receptor-mediated cardiac, lung and/or renal damage or failure CC (particularly where associated with ischaemia, toxin release and/or CC administration of drugs or imaging agents, e.g. adenosine for treating CC supraventricular tachycardia); (adult) respiratory distress syndrome CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive CC pulmonary disease; cardiopulmonary hypoxia associated with administration CC of stress-test agents, particularly where such conditions are associated CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to CC AAA03715 represent specifically claimed phosphorothioate antisense CC oligonucleotides for use in the composition of the present invention. CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other CC phosphorothioate oligonucleotides used in the exemplification of the CC present invention

XX Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 11
DB 2 GCGGGCGGC 11

RESULT 303
AAA03488
ID AAA03488 standard; DNA; 11 BP.
XX
AC AAA03488;
XX
DT 19-MAY-2000 (first entry)
XX
DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:772.
XX
KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
KW endotoxin release; ARDS; acute respiratory distress syndrome;
KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
KW chronic obstructive pulmonary disease; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO963938-A2.
XX
PD 16-DEC-1999.
XX
PF 08-JUN-1999; 99WO-US012775.
XX
PR 08-JUN-1998; 98US-0088501P.
PR 09-JUN-1998; 98US-00093972.
PR 09-JUN-1998; 98US-0088657P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Hill JL;
XX
DR WPI; 2000-116433/10.
XX
PT Novel composition for treating or preventing e.g. cardiopulmonary and renal injury.
XX
PS Claim 17; Page 35; 252pp; English.

CC The present invention describes a pharmaceutical composition, comprising CC at least one agent (I) that prevents, alleviates and/or inhibits CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure. CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide CC (Ib), containing less than 15% adenosine (A), that is antisense to target CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3' CC ends or segments between coding and non-coding sequences), or to all CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at CC least no agonist activity at this receptor). (I) may be a mixture of (Ia) CC and (Ib), and optionally also contains one or more surfactants. The

CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 11 BP; 1 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GGCGGCATCG 15
 Db 1 GGCGGCATCG 10
 |||||
 |||||
 RESULT 304
 AAF19156
 ID AAF19156 standard; DNA; 11 BP.
 AC AAF19156;
 XX
 DT 14-MAR-2001 (first entry)
 DE Human adenosine A1 receptor polynucleotide fragment #723.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosstatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pulmonary vasoconstriction; asthma; RDS;
 KW pulmonary hypertension; emphysema; pain; cystic fibrosis; allergic rhinitis;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 PT Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.

XX Claim 14; Page 117; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytosstatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGC 11
 Db 2 GGAGGGCGGC 11
 |||||
 |||||
 RESULT 305
 AAF19251
 ID AAF19251 standard; DNA; 11 BP.
 AC AAF19251;
 XX
 DT 14-MAR-2001 (first entry)
 DE Human adenosine A1 receptor polynucleotide fragment #818.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosstatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX

PR 06-APR-1999; 99US-0127958P.
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX Nyce JW;
 PI
 XX WPI; 2000-679539/66.
 DR
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 XX Claim 14; Page 118; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with the
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 11 BP; 1 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GCGGCATCG 15
 Db | | | | | | | | | |
 1 GCGGCATCG 10
 RESULT 306
 AAC63866/c
 ID AAC63866 standard; DNA; 11 BP.
 XX
 AC AAC63866;
 XX
 XX 09-FEB-2001 (first entry)
 DT Adapter 2 SEQ ID NO:10, used in human foetal gene isolation.
 XX
 XX Human foetal liver; fls353; fls485; recombinant production; antibody;
 KW drug screening; anticancer agent; adapter; ss.
 XX
 XX Synthetic.
 OS
 XX
 PN WO200061744-A1.
 XX

PD 19-OCT-2000.
 XX
 XX 07-APR-2000; 2000WO-JP002281.
 XX
 XX 09-APR-1999; 99JP-00103356.
 XX
 XX (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
 XX
 XX Nezu J, Ose A;
 XX
 XX WPI; 2000-665131/64.
 DR
 XX Genes expressed specifically in fetal cells and some cancer cells for
 PT screening potential anticancer agents.
 PT
 XX Example 1; Page 40; 111pp; Japanese.
 XX
 XX The invention relates to the novel human foetal liver proteins fls353
 CC (AAB29444) and fls485 (L variant (AAB29445) and S variant (AAB29446)), and
 CC to nucleic acids encoding them (AAC63860-C63862). The invention also
 CC relates to expression vectors and host cells comprising an fls353 or
 CC fls485 DNA, the recombinant production of the proteins, antibodies
 CC against the proteins, and a method for screening compounds for their
 CC ability to bind to, and to inhibit or promote the expression of the
 CC proteins. The fls353 and fls485 proteins and nucleic acids can be used to
 CC identify compounds which regulate the activity and expression of the
 CC proteins. Such compounds may be used as anticancer agents. The present
 CC sequence represents an adapter used in the isolation of fls353 and fls485
 CC cDNAs
 XX
 SQ Sequence 11 BP; 1 A; 7 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGCGGGCGCG 10
 Db | | | | | | | | | |
 11 CGAGGGCGCG 2
 RESULT 307
 ABV68122/c
 ID ABV68122 standard; cDNA; 11 BP.
 XX
 AC ABV68122;
 XX
 XX 21-OCT-2002 (first entry)
 DT Human skin EST 5908.
 XX
 DE Human skin EST 5908.
 XX
 KW Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhoeic;
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO200253774-A2.
 PN
 XX 11-JUL-2002.
 PD
 XX 20-DEC-2001; 2001WO-EP015179.
 PF
 XX 03-JAN-2001; 2001DE-01000127.
 PR
 XX (HENK) HENKEL KGAA.
 XX
 XX Petersohn D, Conradt M, Hofmann K;
 PI
 XX WPI; 2002-590638/63.
 DR
 XX In vitro identification of skin-expressed genes, useful for determining
 PT homeostasis and identifying cosmetic or pharmaceutical agents against

PT e.g. skin cancer.

XX Disclosure; Page 189; 1345pp; German.

XX The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically encoded factors from skin, to serial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression. (M1) is useful for identifying genes involved in skin homeostasis; to determine skin homeostasis and to test agent (A) that maintains or promotes skin homeostasis or that can be used for treating skin disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma; ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus; rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag (EST) of the invention

XX Sequence 11 BP; 0 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
DB 10 GGCGGGCGGC 1

RESULT 308
ADB17604/c
ID ADB17604 standard; DNA; 11 BP.
AC ADB17604;
XX 20-NOV-2003 (first entry)

DE Adaptor 2 (complement sequence) used to isolate mouse WISP-1 cDNA.

XX Wnt-1 induced secreted protein; WISP; Wnt-1 induced gene; WIG; WISP-1;
KW WISP-2; WISP-3; connective tissue growth factor; CRGF; tumour cell;
KW cell death; atherosclerosis; malignant disorder; breast cancer;
KW ovarian cancer; colon cancer; melanoma; antiarteriosclerotic; cytostatic;
KW mouse; ss.

XX Synthetic.
OS Mus musculus.
XX US2003068678-A1.
XX 10-APR-2003.

XX 27-MAR-2002; 2002US-00112267.

XX 29-OCT-1997; 97US-0063704P.
PR 04-FEB-1998; 98US-0073612P.
PR 14-APR-1998; 98US-0081695P.
PR 29-OCT-1998; 98US-00182145.

XX (GETH) GENENTECH INC.
XX Levine AJ, Pennica D;
XX WPI; 2003-596689/56.

XX New nucleic acid encoding Wnt-1-Induced Secreted Protein, useful for preparing a composition for treating a WISP-related disorder in a mammal comprising atherosclerosis or malignant disorder, e.g., breast, ovarian or colon cancer.

XX Example 1; Fig 14; 205pp; English.

XX The present invention relates to the isolation of novel Wnt-1 induced secreted proteins (WISPs, previously known as Wnt-1 induced gene (WIG)

CC polypeptides), and the polynucleotide sequences encoding them. The novel WISP proteins (WISP-1, WISP-2, WISP-3) show homology to connective tissue growth factor (CTGF). Also disclosed are vectors and host cells comprising WISP polynucleotides, chimeric polypeptides comprising WISP polypeptides fused to heterologous polypeptides, antibodies which bind WISP polypeptides, and methods for producing the polypeptides. The antibody may be used in a composition to inhibit the growth of tumour cells by inducing death of the cells which are overexpressing the WISP polypeptides. The WISP polynucleotide sequences are useful for preparing a composition for treating WISP-related disorders such as atherosclerosis and malignant disorders (e.g. breast, ovarian or colon cancer or melanoma) in a mammal. The present sequence is used in the examples of the present invention.

XX Sequence 11 BP; 1 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGGC 10
DB 11 CGCGGGCGGC 2

RESULT 309
ADD43601
ID ADD43601 standard; DNA; 11 BP.
XX AC ADD43601;
XX 15-JAN-2004 (first entry)

DE Oligonucleotide duplex Seq ID45 related to biological interactions.

XX monitoring biological interaction; modified aptamer;
KW phosphorothioate agonist; phosphorothioate antagonist; antibacterial;
KW immunosuppressive; antirheumatic; antiarthritic; antiinflammatory;
KW cytostatic; anti-HIV; antiarteriosclerotic; virucide; neuroprotective;
KW functional proteomics; nuclear factor kappa-B; NF-kappaB; toxic shock;
KW sepsis; rheumatoid arthritis; Crohn's disease;
KW inflammatory bowel disease; asbestos lung disease; Hodgkin's disease;
KW prostate cancer; ventilator induced lung injury; cancer; AIDS;
KW human cutaneous T cell lymphoma; lymphoid malignancy;
KW HTLV-1 induced adult T-cell leukaemia; atherosclerosis; cytomegalovirus;
KW herpes simplex virus; JCV; SV-40; rhinovirus; influenza;
KW neurological disorder; lymphoma; ds.

XX Unidentified.

XX WO2003050290-A2.
XX 19-JUN-2003.

XX 07-AUG-2002; 2002WO-US025049.

XX 15-NOV-2001; 2001US-0334887P.

XX (TEXA) UNIV TEXAS SYSTEM.

XX Gorenstein D, Luxon BA, Herzog N, Yang XB;
XX WPI; 2003-513977/48.

XX New apparatus with a substrate and a modified nucleotide aptamer for monitoring biological interactions, useful for diagnosing and treating NF-kB aptamer-related diseases, such as toxic shock, rheumatoid arthritis, cancer and AIDS.

XX Claim 58; SEQ ID NO 45; 67pp; English.

XX This invention relates to a novel apparatus for monitoring biological interaction which comprises a substrate and a modified aptamer attached

CC to the substrate, where a target molecule or its portion, contacted with
 CC the modified aptamer under conditions to allow formation of a complex
 CC between the modified aptamer and the target molecule or its portion, is
 CC detected. The invention may be useful in developing phosphorothioate
 CC agonists or antagonists which may have antibacterial, immunosuppressive,
 CC antirheumatic, antiarthritic, antiinflammatory, cytostatic, anti-HIV,
 CC antiarteriosclerotic, virucide or neuroprotective activities. The methods
 CC and apparatus of the present invention are useful for monitoring
 CC biological interactions and in functional proteomics. As an example,
 CC nuclear factor kappa-B (NF-kappaB) aptamers can be used in diagnosing and
 CC treating NF-kappaB aptamer-related diseases, such as toxic shock, sepsis,
 CC rheumatoid arthritis, Crohn's disease, generalised inflammatory bowel
 CC disease, asbestos lung diseases, Hodgkin's disease, prostate cancer,
 CC ventilator induced lung injury, general cancer, AIDS, human cutaneous T
 CC cell lymphoma, lymphoid malignancies, HTLV-1 induced adult T-cell
 CC leukaemia, atherosclerosis, cytomegalovirus, herpes simplex virus, JCV,
 CC SV-40, rhinovirus, influenza, neurological disorders and lymphomas. The
 CC present sequence is that of an oligonucleotide duplex which was used
 CC during the exemplification of the invention.

SQ Sequence 11 BP; 0 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGGCGG 10
 ||| |||||
 Db 1 CGGCGGGCGG 10

RESULT 310
 ADD95096/c
 ID ADD95096 standard; DNA; 11 BP.

AC ADD95096;
 XX
 DT 29-JAN-2004 (first entry)

DE Adaptor #4 used in the cloning of human GBP-4 cDNA.

XX Human; guanylate binding protein-4; GBP-4; myelodysplastic disorder;
 KW myeloproliferative syndrome; acute myeloid leukaemia; cancer; gastric;
 KW lung; colon; melanoma; multiple sclerosis; lung disorder;
 KW intestinal-related disorder; interferon-gamma-induced response;
 KW macrophage; fibroblast; immune cell; neuroprotective; cytostatic;
 KW adaptor; ss.

XX Synthetic.

XX US6642024-B1.

XX 04-NOV-2003.

XX 17-AUG-2000; 2000US-00643657.

XX 29-JAN-1998; 98US-00015089.

XX (GETH) GENENTECH INC.

XX Pennica D;

XX WPI; 2003-851360/79.

XX New isolated nucleic encoding guanylate binding protein-4, useful as
 PT hybridization probes, in chromosome and gene mapping, treating cancer,
 PT e.g. gastric cancer or melanoma or combating immunological and
 PT inflammatory responses.

XX Example 1; SEQ ID NO 23; 60pp; English.

XX The present invention relates to the isolation of a novel human guanylate
 CC binding protein (guanylate binding protein-4 or GBP-4), and the

CC polynucleotide sequence encoding it. The polynucleotide sequence encoding
 CC GBP-4, the GBP-4 polypeptide, and antibodies to GBP-4 are useful in
 CC treating myelodysplastic disorders, myeloproliferative syndromes, acute
 CC myeloid leukaemia and cancers (e.g. gastric, lung or colon cancers or
 CC melanoma). The polynucleotide sequence is useful as hybridisation probes,
 CC in chromosome and gene mapping, in generating transgenic animals, in
 CC radioimmunoassays, in inducing formation of anti-GBP-4 antibodies, in
 CC combating immunological and inflammatory responses and other pathological
 CC conditions (e.g. multiple sclerosis or lung and intestinal-related
 CC disorders), as a mediator of any interferon-gamma-induced responses in
 CC macrophages and fibroblasts, and may also function in other immune cell
 CC populations or in protein processing. The present sequence represents an
 CC adaptor used in the examples of the present invention.

XX Sequence 11 BP; 1 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGGCGG 10
 ||| |||||
 Db 11 CGGAGGGCGG 2

RESULT 311
 ADF72794/c
 ID ADF72794 standard; DNA; 11 BP.

XX ADF72794;

XX 26-FEB-2004 (first entry)

XX Lung cancer related oligonucleotide of the invention SEQ ID NO:4.

XX ss; lung cancer; cancer; antibody; cytostatic; IL-20 receptor beta-chain;
 KW IL-20.

XX Synthetic.

XX WO2003090779-A1.

XX 06-NOV-2003.

XX 25-APR-2003; 2003WO-JP005399.

XX 25-APR-2002; 2002JP-00124743.

XX (CHUS) CHUGAI SEIYAKU KK.

XX Nezu J;

XX WPI; 2003-854360/79.

XX Treatment for lung cancer comprises antibodies against IL-20 receptor
 PT beta-chain and antisense polynucleotides for controlling beta chain
 PT expression.

XX Example 1; SEQ ID NO 4; 93pp; Japanese.

XX The invention relates to a novel treatment for lung cancer comprising
 CC antibodies that bind to the IL-20 receptor beta-chain. An antibody of the
 CC invention has cytostatic activity, and controls function and expression
 CC of IL-20 receptor beta-chain. The invention is useful for detection and
 CC treatment of lung cancer. The present sequence is used in the
 CC exemplification of the invention.

XX Sequence 11 BP; 1 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGCGCGG 10
 Db 11 CGAGCGCGG 2

RESULT 312

ABZ94945
 ID ABZ94945 standard; DNA; 11 BP.

XX AC ABZ94945;
 XX DT 17-OCT-2003 (first entry)

XX DE Human adenosine A1 receptor antisense fragment no.808.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.
 XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX PS Disclosure; SEQ ID NO 10187; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antinflammatory steroid and ubiquinone. A composition of the invention
 CC has antinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 11 BP; 1 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATCG 15
 Db 1 GGCGGCATCG 10

RESULT 313

ABZ94850
 ID ABZ94850 standard; DNA; 11 BP.

XX AC ABZ94850;
 XX DT 17-OCT-2003 (first entry)

XX DE Human adenosine A1 receptor antisense fragment no.713.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.
 XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX PS Disclosure; SEQ ID NO 10092; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antinflammatory steroid and ubiquinone. A composition of the invention
 CC has antinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GGCGGGCGGC 11
 Db 2 GGAGGGCGGC 11

RESULT 314
 ABD18698
 ID ABD18698 standard; DNA; 11 BP.
 AC ABD18698;
 XX
 XX
 DT 29-JUL-2004 (first entry)
 XX
 XX Human adenosine A1 receptor oligonucleotide fragment 713.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 10092; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

SQ Sequence 11 BP; 1 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GGCGGGCGGC 11
 Db 2 GGAGGGCGGC 11

RESULT 315
 ABD18793
 ID ABD18793 standard; DNA; 11 BP.
 AC ABD18793;
 XX
 XX 29-JUL-2004 (first entry)
 XX
 XX Human adenosine A1 receptor oligonucleotide fragment 808.
 DE
 XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 10187; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 11 BP; 1 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 90.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGCATCG 15
 Db 1 GCGGCGCATCG 10

RESULT 316
 ADG93360
 ID ADG93360 standard; DNA; 11 BP.
 XX
 AC ADG93360;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Phase lambda unpaired 5' overhang.
 XX
 KW 5' overhang; ss; lambda; DNA stretching; DNA rotation; elasticity;
 KW force study; topology study.
 XX
 OS Bacteriophage lambda.
 XX

FH Key Location/Qualifiers
 FT misc_difference 9 /*tag= a
 FT /label= UNKNOWN
 FT /note= "illegible"
 XX

PN US2003027187-A1.
 XX
 PD 06-FEB-2003.
 XX
 PF 06-JUN-2002; 2002US-00163089.
 XX
 PR 28-MAR-1997; 97US-0041744P.
 PR 27-MAR-1998; 98US-00049200.
 XX
 PA (CNRS) CNRS CENT NAT RECH SCI.
 XX
 PI Strick TR, Allemand JF, Bensimon D, Bensimon A, Croquette V;
 XX
 DR WPI; 2004-088701/09.
 XX
 PT Manipulating and testing of molecules e.g. DNA in which a molecule is
 PT multiply anchored at one end to a fixed surface and at its other end to a
 PT paramagnetic bead, does not need force calibrations or sophisticated
 PT tools.
 XX
 XX Disclosure; Fig 6; 18pp; English.
 PS
 XX The invention relates to manipulating and testing of molecules and in

CC particular of DNA in which a molecule is multiply anchored at one end to
 CC a fixed surface and at its other end to a paramagnetic bead. Also
 CC included is an apparatus for the manipulating and testing of molecules,
 CC e.g. DNA, comprising a surface to which the molecule is anchored at
 CC multiple points at one end by a paramagnetic bead, magnetic forces to
 CC control the stretching and rotation of the bead and molecule, optical
 CC magnification and a camera for the visualisation of the bead and a
 CC computer for analysing motions of the bead from the transmitted camera
 CC images. The molecule is covered with biotin at one of its ends and with
 CC digoxigenin at its other end. The surface is covered with streptavidin. The
 CC elasticity of the molecules is first determined to select the bead(s) on
 CC which just one molecule is attached. The elasticity of a molecule is
 CC changed by rotating the beads around the magnification axis. The
 CC monitoring of the force or of the extension of the molecule is used to
 CC achieve sequencing. The activity of enzymes that interact with DNA by
 CC twisting or coiling it can be measured in real-time. The methods and
 CC apparatus are useful for manipulating and testing DNA, especially for
 CC force and topology studies at the molecular level. The methods and
 CC apparatus do not need force calibrations, nor sophisticated tools unlike
 CC prior art methods. They also allow real time control of the twisting of a
 CC molecule such as DNA in a continuous, reversible and quantitative manner.
 CC The present sequence is the unpaired 5' end of phage lambda DNA, which
 CC can be used to circularise molecules incorporating it and the 3' unpaired
 CC end.
 XX

SQ Sequence 11 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 1 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 GCGGCGCATCG 15
 Db 1 GCGGCGCGNCG 11

RESULT 317
 ADO26321/c
 ID ADO26321 standard; DNA; 11 BP.
 XX
 AC ADO26321;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human chondromedin protein related oligonucleotide #33.
 XX
 KW human; osteopathic; antiarthritic; antirheumatic; chondromedin; marker;
 KW ds.
 XX
 OS Unidentified.
 XX
 PN WO2004039974-A1.
 XX
 PD 13-MAY-2004.
 XX
 PF 30-OCT-2003; 2003WO-JP013919.
 XX
 PR 30-OCT-2002; 2002JP-00315573.
 PR 28-NOV-2002; 2002JP-00345601.
 XX
 PA (TAXE) TAKEDA CHEM IND LTD.
 XX
 PI Watanabe T, Inazuka M;
 XX
 DR WPI; 2004-390322/36.
 XX

PT Novel chondromedin protein or salts, useful as diagnostic markers for
 PT osteitis, arthritis and for screening compounds useful in treating bone
 PT and articular diseases such as fracture, osteoarthritis, rheumatoid
 PT arthritis.
 XX
 PS Example 3; Page 75; 107pp; Japanese.

XX The present invention relates to mature and precursor chondromedin
CC protein sequences. Also provided are the coding sequences. The sequences
CC are useful for preventing and/or treating bone and articular diseases
CC such as fracture, chondrodystrophy, osteodystrophy, osteoporosis,
CC osteoarthritis, rheumatoid arthritis, synovitis and metabolic arthritis,
CC and as markers in the diagnosis of the above conditions. The present
CC sequence is a polynucleotide sequence shown in the exemplification of the
CC invention.

XX
CC
XX Sequence 11 BP; 0 A; 7 C; 3 G; 1 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11
| | | | | | | |
DB 10 GACGGGCGGC 1

RESULT 318
ADQ33914/c
ID ADQ33914 standard; DNA; 11 BP.
XX
AC ADQ33914;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human facial skin-associated DNA fragment SEQ ID NO 2004.
XX
KW facial skin; human; serial analysis of gene expression; SAGE;
KW homeostasis; biochip; cosmetic; pharmaceutical; ds.
XX
OS Homo sapiens.
XX
PN DE10260928-Al.
XX
PD 08-JUL-2004.
XX
PF 20-DEC-2002; 2002DE-01060928.
XX
PR 20-DEC-2002; 2002DE-01060928.
XX
PA (HENK) HENKEL KGAA.
XX
PI Petersohn D, Schlotmann K, Gassenmeier T, Holtkoetter O;
PI Conradt M, Hofmann K;
XX
DR WPI; 2004-518855/50.
XX
PT In vitro identification of genes important for facial skin, useful for
PT assessing homeostasis and in screening for pharmaceutical or cosmetic
PT agents, based on differential expression analysis.
XX
PS Claim 5; SEQ ID NO 2004; 577pp; German.
XX
CC This invention describes a novel in vitro method for identifying genes
CC that are significant for facial skin in humans. The method comprises
CC recovering, from facial skin, a first mixture of genetically expressed
CC (transcribed and optionally translated) factors (i.e. proteins, mRNA or
CC their fragments), recovering a second, similar mixture from some other
CC human tissue, preferably skin from a protected area, especially from the
CC breast and subjecting the mixtures to serial analysis of gene expression
CC (SAGE) to identify those genes for which expression is markedly different
CC between facial skin and the other tissue. The invention also describes an
CC in vitro method for determining homeostasis of human facial skin; a test
CC kit which comprises a solid support (flexible or rigid) on which are
CC immobilised probes that bind specifically to the factors of interest and
CC a biochip for determining homeostasis of human facial skin. The products
CC of the invention are also used in a method which determines activity of
CC cosmetic and pharmaceutical agents for use against disorders or
CC disturbances of the homeostasis of human skin and a screening method for

CC identifying cosmetic and pharmaceutical agents. The method allows
CC identification of as many as possible of the genes important for facial
CC skin and thus of a very wide range of potential therapeutic and cosmetic
CC agents. ADQ33911-ADQ33911 represent human DNA tag fragments used to
CC identify the facial skin-associated genes described in the invention.

XX
CC
XX Sequence 11 BP; 0 A; 6 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGGC 11
| | | | | | | |
DB 10 GCGCGGCGGC 1

RESULT 319
ADU73966/c
ID ADU73966 standard; DNA; 11 BP.
XX
AC ADU73966;
XX
DT 10-FEB-2005 (first entry)
XX
DE Adaptor lower strand.
XX
KW Plant fungal disease; crop improvement; transgenic plant;
KW Melampsora lini; adaptor; ds.
XX
OS Synthetic.
XX
PN WO2004099417-Al.
XX
PD 18-NOV-2004.
XX
PF 07-MAY-2004; 2004WO-AU000602.
XX
PR 07-MAY-2003; 2003AU-00902173.
XX
PA (CSIR) COMMONWEALTH SCI & IND RES ORG.
PA (GRAI-) GRAINS RES & DEV CORP.
XX
PI Dodds PN, Lawrence GJ, Ayliffe MA, Ellis JG;
XX
DR WPI; 2004-814058/80.
XX
PT New nucleic acid molecule comprising a sequence of nucleotides encoding
PT or complementary to a sequence of nucleotides encoding an avirulence
PT product of a plant rust fungus, useful in inducing a disease resistance
PT response in a plant.
XX
PS Example 1; SEQ ID NO 32; 156pp; English.
XX
CC The present sequence is that of the lower strand of a double-stranded
CC adaptor molecule. The upper strand sequence is also provided ADU73965.
CC The adaptor was added to cDNA samples derived from Melampsora lini (flax
CC rust) RNA in the preparation of driver and tester cDNAs for subtractive
CC hybridizations. Libraries were constructed from subtracted cDNAs and used
CC to identify nucleic acids ADU73936-ADU73950 encoding avirulence products
CC ADU73951-ADU73962 of M. lini. Such nucleic acid molecules can be used in
CC transformation of a plant to induce a disease resistance response in the
CC plant, optionally by co-expression with a corresponding disease
CC resistance gene in the plant. The transformed plant is a crop or cereal
CC plant, especially flax or tobacco.

XX
CC
XX Sequence 11 BP; 1 A; 7 C; 2 G; 1 T; 0 U; 0 Other;
Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGCGCGG 10

```
Db      ||| |||||
      11 CGGAGGGCGG 2

RESULT 320
ADU59664/c
ID ADU59664 standard; DNA; 11 BP.
XX
AC ADU59664;
XX
DT 10-FEB-2005 (first entry)
XX
DE Adaptor oligonucleotide, SEQ ID 23.
XX
KW Cytostatic; antiinflammatory; gene therapy; gastric adenocarcinoma;
KW inflammatory disorder; cancer; ss.
XX
OS Synthetic.
XX
PN US2004229307-A1.
XX
PD 18-NOV-2004.
XX
PF 10-SEP-2003; 2003US-00659549.
XX
PR 29-JAN-1998; 98US-00015089.
PR 17-AUG-2000; 2000US-00643657.
XX
PA (GETH ) GENENTECH INC.
XX
PI Pennica D;
XX
PS WPI; 2004-813250/80.
XX
PT New guanylate-binding protein-4 (GBP-4) polypeptide, useful in preparing
PT a composition for treating inflammatory disorders or cancer.
XX
PS Example 1; SEQ ID NO 23; 62pp; English.
XX
CC The present invention relates to a novel human guanylate-binding protein-
CC 4 (GBP-4; ADU59645) and its coding sequence (ADU59643 and ADU59673). The
CC cDNA clone encoding GBP-4 was isolated from a gastric adenocarcinoma by
CC suppressive subtractive hybridization (SSH). The human GBP-4 gene was
CC localized to chromosome 1p31-1p32. Immunoelectron microscopy indicated
CC that GBP-4 is associated with the membranes of endolysosomes. GBP-4 was
CC found to be expressed in many normal tissues, with the highest levels in
CC peripheral blood leukocytes, lymph node and the spleen as well as gastric
CC adenocarcinoma tissue. GBP-4 expression is induced in human cell lines by
CC gamma-interferon (IFN-gamma). GBP-4 is useful in preparing a composition
CC for treating inflammatory disorders or cancer. The present
CC oligonucleotide was used in an example from the invention for isolating
CC the GBP-4 coding sequence using the SSH technique.
XX
SQ Sequence 11 BP; 1 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGGCGG 10
||| |||||
Db 11 CGGAGGGCGG 2

RESULT 321
ADZ24805/c
ID ADZ24805 standard; DNA; 11 BP.
XX
AC ADZ24805;
XX
DT 16-JUN-2005 (first entry)
XX
DE Human SNP detection related oligonucleotide #1772.

XX
KW ss; haplotype mapping; SNP detection; tumor; cytostatic; neoplasm;
KW immune disorder; cardiovascular disease; metabolic disorder;
KW respiratory disease; musculoskeletal disease; renal disease;
KW nephrotropic; endocrine disease; genitourinary disease.
XX
OS Homo sapiens.
XX
PN WO2005030952-A1.
XX
PD 07-APR-2005.
XX
PF 30-SEP-2004; 2004WO-JP014784.
XX
PR 30-SEP-2003; 2003JP-00342519.
PR 28-MAY-2004; 2004JP-00158717.
XX
PA (RIKE ) RIKEN KK.
PA (STAG-) STAGEN CO LTD.
PA (SEKI/) SEKINE A.
PA (IIDA/) IIDA A.
PA (SAIT/) SAITO S.
XX
PI Sekine A, Iida A, Saito S, Nakamura Y, Kamatani N;
XX
PS WPI; 2005-305936/31.
XX
PT Analyzing haplotype, by detecting polymorphism in drug-related genes,
PT electing common polymorphism (CP), building haplotype block using CP,
PT specifying CP within block, specifying tag polymorphism from CP within
PT block.
XX
PS Disclosure; SEQ ID NO 1772; 1290pp; Japanese.
XX
CC The invention relates to a method of analyzing haplotype, by detecting
CC gene polymorphism in drug-related genes such as aryl acetylarnide
CC deacetylase, arylalkylamine N-acetyl transferase or ATP-binding cassette,
CC sub-family A (ABCI), member 1. The method is useful for analyzing or disease
CC haplotype. The method is useful for estimating the sensitivity or disease
CC of a medicine or a foreign material, for selecting the sensitivity of
CC preventing or treating diseases, for determining appropriate dosage of
CC medicine for preventing or treating a disease, for analyzing a drug
CC interaction, and for determining the related polymorphism relative to the
CC sensitivity of the medicine, foreign material or disease. The diseases
CC include malignant tumor, immune disorder circulatory disease, metabolic
CC disease, kidney disease, respiratory disease and muscle associated
CC disease. The method enables analysis of the individual differences
CC related to the sensitivity of a medicine, using a haplotype, without
CC using each single nucleotide polymorphism. The present sequence
CC represents a human SNP detection related oligonucleotide.
XX
SQ Sequence 11 BP; 1 A; 6 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 11;
Best Local Similarity 90.0%; Pred. No. 1.9e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGGCGGGCAT 13
||| |||||
Db 10 CGGCGGGCAT 1

RESULT 322
AAT41826
ID AAT41826 standard; DNA; 12 BP.
XX
AC AAT41826;
XX
DT 25-MAR-2003 (revised)
DT 18-DEC-1996 (first entry)
XX
DE HLA allele, HLA-DQB1*03 resolution probe, PPAA.57.
XX
```

```

KW Human leukocyte antigen; HLA; allele; HLA-DR*08; HLA-DR*12; locus B1;
KW polymorphism; amplify; conserved region; detection; primer; probe;
KW tissue matching; identifying disease susceptibility; ss.
XX
XX Synthetic.
XX US5545526-A.
XX 13-AUG-1996.
XX
XX 01-MAR-1993; 93US-00025038.
XX
XX 27-JUN-1990; 90US-00544218.
XX
XX (BLOO-) BLOOD CENT RES FOUND INC.
XX
XX Baxter-Lowe LA;
XX
XX WPI; 1996-383664/38.
XX
XX Human leukocyte antigen typing of tissue samples - using allele-specific
XX amplification to distinguish allele pairs.
XX
XX Example 2; Col 19; 24pp; English.
XX
XX The sequences given in AAT41821-29 represent probes which were used to
XX resolve the human leukocyte antigen (HLA) DQB1*03 alleles. This probe
XX sequence hybridises to sequences found in alleles 0302 and 0304. These
XX probes may be used in the method of invention which concerns HLA typing
XX of a sample for an unknown pair of alleles. The pair of alleles comprises
XX one of two known types which have the same overall set of polymorphisms
XX but have a different distribution of polymorphisms between their two
XX alleles. The method comprises selectively amplifying the DNA of just one
XX allele of the unknown pair and analysing the amplified DNA to determine
XX which polymorphisms are present in that allele, and therefore assigning
XX the unknown pair to the known type having that allele. The method
XX comprises three test stages. The first stage is to establish the number
XX of alleles present in each sample. Primers corresponding to fairly well
XX conserved regions of a locus will increase the likelihood that unknown
XX alleles will be amplified and potentially detected by hybridisation with
XX a probe. In the second stage, the group or basic type identified
XX determines which set of allele specific primers will be used. The first
XX of the two primers comprises an opt. labelled sequence common to each
XX allele of the group identified in the first stage but different from
XX other groups identified in stage one. The second primer may be a mixture
XX of different labelled primers, complementary to two or more sequences
XX within the group, or the amplification may be performed with only one
XX second primer to detect the presence of a single group of alleles. In the
XX third stage the specific allele is determined. This may be done by
XX amplification or hybridisation using a radiolabelled probe. The method
XX may be used for tissue matching, identifying disease susceptibility, etc.
XX The method of the invention esp. distinguishes between
XX DQB1*0304/DQB1*03032 and DQB1*0301/DQB1*0302. (Updated on 25-MAR-2003 to
XX correct PF field.)
XX
XX Sequence 12 BP; 1 A; 3 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 2.2e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGGCGG 10
    |||||
Db 3 CGGCGGGCGG 12

RESULT 323
AAV47308
ID AAV47308 standard; DNA; 12 BP.
XX
XX AAV47308;
AC
XX
XX 10-NOV-1998 (first entry)
DT

Antisense oligonucleotide 691, targeting adenosine A1 receptor.

```

```

XX Antisense oligonucleotide 808, targeting adenosine A1 receptor.
XX
XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
XX bronchoconstriction; lung inflammation; asthma; pulmonary disease;
XX allergy; emphysema; cystic fibrosis; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..12
XX /*tag= a
XX /note= "contains phosphorothioate internucleotide
XX linkages"
XX
XX WO9823294-A1.
XX
XX 04-JUN-1998.
XX
XX 26-NOV-1997; 97WO-US022017.
XX
XX 26-NOV-1996; 96US-00757024.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW;
XX
XX WPI; 1998-322464/28.
XX
XX Treating respiratory disease with antisense sequences directed against
XX adenosine or bradykinin receptors - with localised delivery to the
XX respiratory system, suitable for long term treatment of asthma, adult
XX respiratory distress syndrome etc.
XX
XX Claim 12; Page 8-24; 47pp; English.
XX
XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
XX human adenosine A1 receptor, the design of which required the secondary
XX structure of this targets mRNA. The adenosine receptor mRNA secondary
XX structure was both analysed and used to construct antisense
XX oligonucleotides containing a phosphorothioate backbone. Once the
XX antisense molecules are created they can be used to target their
XX predetermined target, thus causing the gene product to decrease. The
XX antisense oligonucleotides were targeted to specific mRNA regions
XX containing either a junction between the intron and exon, or where they
XX may overlap the initiation codon. The receptor is a member of the G-
XX protein coupled family of cell surface receptors that have 7-
XX transmembrane segments. These oligonucleotides can be used to treat or
XX prevent conditions associated with bronchoconstriction and/or lung
XX inflammation in humans or other animals e.g. asthma, pulmonary disease,
XX allergy, emphysema and cystic fibrosis
XX
XX Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 2.2e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGCGGCATCG 15
    |||||
Db 1 GCGCGGCATCG 10

RESULT 324
AAV47191
ID AAV47191 standard; DNA; 12 BP.
XX
XX AAV47191;
AC
XX
XX 10-NOV-1998 (first entry)
DT

Antisense oligonucleotide 691, targeting adenosine A1 receptor.

```

XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 modified_base 1..12
 FT /*tag= a
 FT /note= "contains phosphorothioate internucleotide
 linkages"
 XX
 PN WO9823294-A1.
 XX
 PD 04-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US022017.
 XX
 PR 26-NOV-1996; 96US-00757024.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1998-322464/28.
 XX
 XX Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX
 PS Claim 12; Page 8-24; 47pp; English.
 XX
 CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGCGCGC 11
 || |||||
 Db 3 GGAGGGCGGC 12
 RESULT 325
 AAX53685
 ID AAX53685 standard; DNA; 12 BP.
 AC AAX53685;
 XX
 XX 05-JUL-1999 (first entry)
 DT
 DE Human adenosine A1 receptor antisense oligonucleotide fragment.
 XX
 KW Antisense oligonucleotide; multiple target; antisense treatment;

KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX Synthetic.
 OS
 XX WO9913886-A1.
 PN
 XX 25-MAR-1999.
 PD
 XX 17-SEP-1998; 98WO-US019419.
 PF
 XX 17-SEP-1997; 97US-0059160P.
 PR
 XX 09-JUN-1998; 98US-00093972.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX Nyce JW;
 PI
 XX WPI; 1999-229400/19.
 DR
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 PT
 XX Disclosure; Page 40; 120pp; English.
 PS
 XX The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3',
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GGCGGCATCG 15
 |||||
 Db 1 GGCGGCATGG 10
 RESULT 326
 AAX53568
 ID AAX53568 standard; DNA; 12 BP.
 AC AAX53568;
 XX
 XX 05-JUL-1999 (first entry)
 DT
 DE Human adenosine A1 receptor antisense oligonucleotide fragment.

XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthetic.
 XX
 PN WO9913886-A1.
 XX
 PD 25-MAR-1999.
 XX
 XX 17-SEP-1998; 98WO-US019419.
 XX
 PR 17-SEP-1997; 97US-0059160P.
 PR 09-JUN-1998; 98US-00093972.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX
 PI Nyce JW;
 XX
 DR WPI; 1999-229400/19.
 XX
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 PT
 XX
 PS Disclosure; Page 38; 120pp; English.
 XX
 CC The specification describes antisense oligonucleotides (AA352869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AA35272-74. These multiple target oligonucleotides
 CC (specifically AA35180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 XX
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 XX
 QY 2 GGCGGGCGGC 11
 || |||||
 DB 3 GGAGGGCGGC 12
 RESULT 327
 AAA33011
 ID AAA33011 standard; DNA; 12 BP.
 XX
 AC AAA33011;
 XX
 DT 28-JUL-2000 (first entry)

XX
 DE Low adenosine antisense oligonucleotide SEQ ID NO:700.
 XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiasthmatic; antiasthmatic; cytosolic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 XX 03-AUG-1999; 99WO-US017712.
 XX
 PR 03-AUG-1998; 98US-0095212P.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 PS Claim 18; Page 354; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytosolic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
 CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AA32313 to AA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AA32323 to
 CC AA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 XX
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 XX
 QY 2 GGCGGGCGGC 11
 || |||||
 DB 3 GGAGGGCGGC 12
 RESULT 328

CC present invention
 SQ Sequence 12 BP; 2 A; 7 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 6 GCGGCGCATCG 15
 |||||
 DB 12 GCGGCGTATCG 3
 RESULT 330
 AAA03487
 ID AAA03487 standard; DNA; 12 BP.
 XX
 AC AAA03487;
 XX
 DT 19-MAY-2000 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:771.
 XX
 KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO9963938-A2.
 XX
 PD 16-DEC-1999.
 XX
 XX
 XX 08-JUN-1999; 99WO-US012775.
 XX
 PR 08-JUN-1998; 98US-0088501P.
 PR 09-JUN-1998; 98US-00093972.
 PR 09-JUN-1998; 98US-0088657P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Hill JL;
 XX
 DR WPI; 2000-116433/10.
 XX
 PT Novel composition for treating or preventing e.g. cardiopulmonary and renal injury.
 XX
 PS Claim 17; Page 35; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising at least one agent (I) that prevents, alleviates and/or inhibits adenosine-mediated cardiopulmonary and/or renal damage and/or failure. (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide (Ib), containing less than 15% adenosine (A), that is antisense to target genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3' ends or segments between coding and non-coding sequences), or to all segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and has A1, A2b or A3 agonist activity or A2a antagonist activity (or at least no agonist activity at this receptor). (I) may be a mixture of (Ia) and (Ib), and optionally also contains one or more surfactants. The compositions are used to prevent, alleviate and/or treat adenosine receptor-mediated cardiac, lung and/or renal damage or failure (particularly where associated with ischaemia, toxin release and/or administration of drugs or imaging agents, e.g. adenosine for treating supraventricular tachycardia); (adult) respiratory distress syndrome (e.g. associated with sepsis); allergic rhinitis; chronic obstructive pulmonary disease; cardiopulmonary hypoxia associated with administration

CC of stress-test agents, particularly where such conditions are associated with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to AAA03715 represent specifically claimed phosphorothioate antisense oligonucleotides for use in the composition of the present invention. AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other phosphorothioate oligonucleotides used in the exemplification of the present invention
 XX
 SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 6 GCGGCGCATCG 15
 |||||
 DB 1 GCGGCGCATCG 10
 RESULT 331
 AAA03370
 ID AAA03370 standard; DNA; 12 BP.
 XX
 AC AAA03370;
 XX
 DT 19-MAY-2000 (first entry)
 XX
 DE Human adenosine A1 receptor antisense oligonucleotide SEQ ID NO:554.
 XX
 KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO9963938-A2.
 XX
 PD 16-DEC-1999.
 XX
 XX
 XX 08-JUN-1999; 99WO-US012775.
 XX
 PR 08-JUN-1998; 98US-0088501P.
 PR 09-JUN-1998; 98US-00093972.
 PR 09-JUN-1998; 98US-0088657P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Hill JL;
 XX
 DR WPI; 2000-116433/10.
 XX
 PT Novel composition for treating or preventing e.g. cardiopulmonary and renal injury.
 XX
 PS Claim 17; Page 33; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising at least one agent (I) that prevents, alleviates and/or inhibits adenosine-mediated cardiopulmonary and/or renal damage and/or failure. (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide (Ib), containing less than 15% adenosine (A), that is antisense to target genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3' ends or segments between coding and non-coding sequences), or to all segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and has A1, A2b or A3 agonist activity or A2a antagonist activity (or at least no agonist activity at this receptor). (I) may be a mixture of (Ia) and (Ib), and optionally also contains one or more surfactants. The compositions are used to prevent, alleviate and/or treat adenosine

CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGGC 11
 Db 3 GGAGGGCGGC 12
 || |||||
 || |||||
 RESULT 332
 AAF19133
 ID AAF19133 standard; DNA; 12 BP.
 AC
 XX AAF19133;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #700.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cycostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 XX 26-OCT-2000.
 PD
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 XX 06-APR-1999; 99US-0127958P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 XX
 XX WPI; 2000-679539/66.
 DR
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 XX Claim 14; Page 117; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,

CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGGC 11
 Db 3 GGAGGGCGGC 12
 || |||||
 || |||||
 RESULT 333
 AAF19250
 ID AAF19250 standard; DNA; 12 BP.
 AC
 XX AAF19250;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #817.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cycostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 XX 26-OCT-2000.
 PD
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 XX 06-APR-1999; 99US-0127958P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX Nyce JW;

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 8 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 2.2e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGCGGCGG 10
Db 11 CGCGCGGTGG 2

RESULT 336
ABI14198
ID ABI14198 standard; DNA; 12 BP.
XX
AC ABI14198;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 314171 for detecting SNP TSC0026157.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 314171; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 1 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 2.2e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGCGCG 10
Db 1 CGGAGGCGG 10

RESULT 337
AAF27246/C
ID AAF27246 standard; DNA; 12 BP.
XX
AC AAF27246;
XX
DT 24-APR-2001 (first entry)
XX
DE TaqI adapter, strand #2.
XX
XX Selective cloning; mismatch detection; mismatch binding protein; MutS;
KW mutant gene; bacterial infection; TaqI adapter; ss.
XX
OS Synthetic.
XX
PN JP2000308489-A.
XX
PD 07-NOV-2000.
XX
PF 28-APR-1999; 99JP-00121957.
XX
PR 28-APR-1999; 99JP-00121957.
XX
PA (DAUC) DAIICHI PHARM CO LTD.
XX
DR WPI; 2001-127778/14.
XX
PT Detection of minutely mutated DNA useful for detection and treatment of
PT Pseudomonas aeruginosa, and development of antibacterial agents comprises
PT cloning a structurally characterized DNA.
XX
PS Example 4; Page 8; 13pp; Japanese.
XX
XX The invention relates to a method of cloning a structurally
CC characterised DNA or a flanking DNA containing part of the characterised
CC region by concentrating the DNA of interest using a substance which
CC specifically recognises the structurally characterised region or a
CC fragment thereof, and selectively cloning only the DNA of interest by
CC subtraction treatment. The invention especially relates to a method for
CC cloning or detecting a minutely mutated DNA by concentrating the mutated
CC DNA using a substance (such as a mismatch repair protein) which
CC specifically recognises mismatched DNA, and selectively cloning only the
CC mutant DNA. Such a method of detection may also be used in the diagnosis
CC of disease associated with DNA mutations. The method was exemplified by
CC the cloning and sequencing of DNA from the PAO128 strain of Pseudomonas
CC aeruginosa using an immobilised maltose binding protein (MBP)-MutS fusion
CC protein, and the corresponding DNA from Pseudomonas aeruginosa strain
CC PAO1 (which was designated as the wild-type). The MutS portion of the
CC fusion protein recognised mismatches in PAO1/PAO128 DNA duplexes. The
CC mutant (i.e., PAO128) DNA was thus concentrated, amplified via PCR, and
CC contaminating DNA removed by RDA. A Pseudomonas aeruginosa strain PAO128
CC library was constructed and its genome sequenced. Such a protocol may be
CC used for the detection of Pseudomonas aeruginosa infection, and in the
CC development of antibacterial agents. Sequences AAF27245-AAF27246
CC represent the strands of an adapter used in an exemplification of the
CC invention
XX
SQ Sequence 12 BP; 1 A; 5 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 2.2e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATCG 15
 Db 10 GGCGGCATCG 1

RESULT 338
 ABX14213/c
 ID ABX14213 standard; DNA; 12 BP.
 XX AC
 XX AC
 XX 25-FEB-2003 (first entry)
 XX PCR primer for differential display #2.
 XX ss; PCR; primer; differential display; gene expression; EST;
 XX expressed sequence tag.
 XX Unidentified.
 XX CN1354259-A.
 XX 19-JUN-2002.
 XX 22-NOV-2000; 2000CN-00127496.
 XX 22-NOV-2000; 2000CN-00127496.
 XX (SHAN-) SHANGHAI BIOENGINEERING RES CENT CHINESE.
 XX Li R, Kang J, Wang Z;
 XX WPI; 2002-751448/82.
 XX Quickly-ordered gene expression difference display method.
 XX Example 1; Page 8 (disclosure); 22pp; Chinese.
 XX The invention relates to a gene expression differential display method
 CC for systematically comparing different gene expression integral
 CC conditions and finding differentially displayed genes, comprising (a)
 CC firstly, using random primer and ligand-labeled oligo (dT) primer to
 CC synthesise double-stranded cDNA; (b) using the in-wall tube with ligand
 CC coating to adsorb the cDNA 3' terminal enzyme-cut fragment labeled with
 CC ligand; (c) making the absorbed double-stranded cDNA undergo the
 CC processes of enzyme-cutting and elution, and connect with linker; and (d)
 CC making the material undergo the processes of first-turn PCR amplification
 CC and second-turn selective PCR amplification so as to obtain clear 3' ESTs
 CC (expressed sequence tags) discrete spectrum. The present sequence is a
 CC PCR primer used in the method of the invention
 XX
 SQ Sequence 12 BP; 1 A; 8 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGGCGGCGG 10
 Db 11 CGGAGGCGG 2

RESULT 339
 ABK70579/c
 ID ABK70579 standard; DNA; 12 BP.
 XX AC
 XX ABK70579;
 XX 15-JUL-2002 (first entry)
 XX Ligand binding affinity determining oligonucleotide #21.
 XX Ligand binding affinity; ss.

XX Synthetic.
 XX US6355428-B1.
 XX 12-MAR-2002.
 XX 10-SEP-1999; 99US-00393783.
 XX 11-SEP-1998; 98US-00151890.
 XX (GENE-) GENELABS TECHNOLOGIES INC.
 XX Schroth GP, Bruice TW, Suh YJ;
 XX WPI; 2002-380936/41.
 XX Determining relative affinity of ligands for oligonucleotides, from
 FT ability to separate a duplex of oligonucleotides, one labeled and the
 FT other having a signal modifying group.
 XX Disclosure; Col 17; 51pp; English.
 XX The invention relates to a method for determining the relative binding
 CC affinities of a ligand to different oligonucleotides. A mixture is formed
 CC from two oligonucleotides, one carrying a label and a second containing a
 CC group that alters the signal from the label, when the sequences
 CC hybridise. In the absence of the ligand, the oligonucleotides exist
 CC mainly in single-stranded form and the signal is recorded in this state.
 CC The ligand is then added and the signal measured again, and the effect
 CC compared with that observed for a different pair of oligos. The relative
 CC binding affinities of the ligands are determined by comparing their
 CC effects. Sequences ABK70559-ABK70629 represent oligonucleotides used for
 CC determining relative binding affinities of ligands
 XX
 SQ Sequence 12 BP; 2 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATCG 15
 Db 12 GGCGGTATCG 3

RESULT 340
 AAI70896
 ID AAI70896 standard; DNA; 12 BP.
 XX AC
 XX AAI70896;
 XX 12-MAR-2002 (first entry)
 XX Molecular beacon component oligonucleotide.
 XX Molecular beacon; ligation; detection; ss.
 XX Synthetic.
 XX Key Location/Qualifiers
 FH misc_binding 1..5
 FT /tag= b
 FT /bound_moiety= "oligonucleotide P"
 FT /note= "forms double-stranded region with bases 1-5 of
 FT sequence in AAI70897"
 FT modified_base 1
 FT /tag= a
 FT /label= OTHER
 FT /note= "5' phosphate"
 FT misc_feature 6
 FT /tag= c
 FT /note= "N at position 6 represents a target-specific

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FT modified_base      sequence of G, C, A or T bases"
FT 12
FT /*tag= d
FT /label= OTHER
FT /note= "3' quencher"
XX
XX WO200183820-A1.
XX
XX 08-NOV-2001.
XX
XX 27-APR-2001; 2001WO-US013719.
XX
XX 28-APR-2000; 2000US-0200333P.
XX
XX (MONT-) MONTCLAIR GROUP.
XX
XX Beckman KB, Mancebo R;
XX
XX WPI; 2002-075171/10.
XX
XX Making molecular beacons for detecting juxtaposed nucleic acids,
PT comprises ligating two oligonucleotides corresponding to the two
PT subsequences of beacon and monitoring ligation-dependent change in signal
PT output of beacon.
XX
XX Disclosure; Fig 9; 69pp; English.
XX
XX The present sequence is that of an oligonucleotide used in a template-
CC dependent ligation-based method of molecular beacon (MB) synthesis. In
CC this method, the MB is formed by ligation of 2 (or more)
CC oligonucleotides, which are aligned on a template oligonucleotide (see
CC AAI70897) to place the 3' and 5' ends of the 2 oligonucleotides into
CC proximity for the ligation reaction to occur. The first oligonucleotide
CC and the template can be batch synthesised, with only the second
CC oligonucleotide (present sequence), which includes the portion of the MB
CC that is specific for a target of interest, being custom made. Ligation is
CC performed using T4 ligase, Escherichia coli ligase, a thermostable ligase
CC or any other enzyme capable of ligating nicks in a double-stranded DNA
CC molecule. The final MB (see AAI70898) has a fluorophore at its 5' (or 3')
CC end and a quencher molecule at its 3' (or 5') end. In non-hybridised
CC form, the MB forms a hairpin loop structure in which the fluorescence and
CC quencher moieties are proximal. The MB loop is complementary to a
CC sequence of interest. Hybridisation forces dissociation of the MB stem,
CC distancing the fluorophore from the quencher, causing an increase in
CC fluorescence of the MB. The modular synthesis strategy overcomes previous
CC problems of scalability, purification and synthesis of MBs. The MBs can
CC comprise nucleic acids, peptide nucleic acids, or both. They are useful
CC for detecting a juxtaposition of two or more target subsequences
CC juxtaposed by RNA splicing, RNA splicing and reverse transcription,
CC ligation or PCR, in a target nucleic acid. Methods, devices, ligation
CC mixtures and libraries of MB components are provided for high-throughput
CC synthesis and ligation optimization
XX
XX Sequence 12 BP; 1 A; 4 C; 6 G; 0 T; 0 U; 1 Other;

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Query Match      52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 81.8%; Pred. No. 2.2e+02;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 1 CGCGCGGCGGC 11
    |||||
DB 1 CGACGNGCGGC 11

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RESULT 341
AAD45589/C
ID AAD45589 standard; DNA; 12 BP.

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XX AAD45589;
XX
XX 27-DEC-2002 (first entry)
XX
XX Competitor oligo containing poly A/T tract #2.

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XX Competitive binding assay; binding affinity; ligand; indicator;
KW competitor; ss.
XX
XX Unidentified.
XX
XX US6420109-B1.
XX
XX 16-JUL-2002.
XX
XX 11-SEP-1998; 98US-00151890.
XX
XX 11-SEP-1998; 98US-00151890.
XX
XX (GENE-) GENELABS TECHNOLOGIES INC.
XX
XX Schroth GP, Bruice TW, Suh YJ;
XX
XX WPI; 2002-626078/67.
XX
XX New assay for determining relative binding affinities of a ligand to
PT different oligonucleotide sequences is useful to determine nucleic acid
PT binding specificities and base pair determinants of particularly ligands.
XX
XX Disclosure; Col 12; 32pp; English.
XX
XX The invention relates to methods for determining relative binding
CC affinities of a ligand to different oligonucleotide sequences, using
CC indicator oligonucleotide pairs having a signal and a signal-altering
CC group attached in direct or competitive binding assays. The method is
CC used to determine nucleic acid binding specificities and base pair
CC determinants of particular ligands. The present sequence is a competitor
CC oligonucleotide used to illustrate the method of the invention
XX
XX Sequence 12 BP; 2 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

```

```

Query Match      52.5%; Score 8.4; DB 1; Length 12;
Best Local Similarity 90.0%; Pred. No. 2.2e+02;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 6 GGCGGCATCG 15
    |||||
DB 12 GGCGGCATCG 3

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RESULT 342
ACA61747/c
ID ACA61747 standard; DNA; 12 BP.

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XX ACA61747;

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XX 20-AUG-2003 (first entry)

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XX Sample preparation and multiplex detection apparatus DNA #7.

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XX Multiplex detection; ss; spacer element; three dimensional capture probe.

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XX Unidentified.

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XX US2003032029-A1.

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XX 13-FEB-2003.

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XX 12-MAR-2002; 2002US-00096718.

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XX 21-DEC-1998; 98US-00217472.

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XX (NANO-) NANOGEN INC.

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XX Collins ML;

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XX WPI; 2003-466222/44.

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PT Apparatus for carrying out sample preparation and detection of panels of
 PT target nucleic acids and antigens in a sample, has sample preparation
 XX zone, three dimensional capture probe platforms and spacer elements.

PS Example 1; Page 9; 4lpp; English.

XX
 CC The invention relates to an apparatus for carrying out sample preparation
 CC and multiplex detection of panels of target nucleic acids and antigens in
 CC a sample, comprising a sample preparation zone, several three dimensional
 CC capture probe platforms for capturing specific classes of target
 CC molecules and spacer elements for separating the sets of three
 CC dimensional capture probe platforms. The apparatus is useful for carrying
 CC out multiplex detection of panels of target nucleic acids and antigens in
 CC a sample, by providing a sample containing target nucleic acids and/or
 CC antigens of interest, treating the sample with a sample buffer to form a
 CC pre-processed sample, passing the pre-processes sample over the
 CC apparatus, capturing the target nucleic acids and antigens by capture
 CC probes of the apparatus, reacting a label with a signal probe, the signal
 CC probe having specificity for at least one other signal probe, that is
 CC specific for the target and detecting the reacted level. Sequences
 CC ACA61741-ACA61800 and ACD17023-ACD17041 represent DNA molecules used in
 CC the scope of the invention

XX SQ Sequence 12 BP; 4 A; 4 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCATCG 15
 | |||||
 Db 10 GTCGGCATCG 1

RESULT 343

AC61767
 ID ACA61767 standard; DNA; 12 BP.

XX ACA61767;

XX 20-AUG-2003 (first entry)

DE Sample preparation and multiplex detection apparatus DNA #27.

XX Multiplex detection; ss; spacer element; three dimensional capture probe.

XX Unidentified.

XX US2003032029-A1.

XX 13-FEB-2003.

XX 12-MAR-2002; 2002US-00096718.

XX 21-DEC-1998; 98US-00217472.

XX (NANO-) NANOGEN INC.

XX Collins ML;

XX WPI; 2003-466222/44.

XX Apparatus for carrying out sample preparation and detection of panels of
 PT target nucleic acids and antigens in a sample, has sample preparation
 PT zone, three dimensional capture probe platforms and spacer elements.

XX Disclosure; Page 19; 4lpp; English.

XX The invention relates to an apparatus for carrying out sample preparation
 CC and multiplex detection of panels of target nucleic acids and antigens in
 CC a sample, comprising a sample preparation zone, several three dimensional
 CC capture probe platforms for capturing specific classes of target
 CC molecules and spacer elements for separating the sets of three

CC dimensional capture probe platforms. The apparatus is useful for carrying
 CC out multiplex detection of panels of target nucleic acids and antigens in
 CC a sample, by providing a sample containing target nucleic acids and/or
 CC antigens of interest, treating the sample with a sample buffer to form a
 CC pre-processed sample, passing the pre-processes sample over the
 CC apparatus, capturing the target nucleic acids and antigens by capture
 CC probes of the apparatus, reacting a label with a signal probe, the signal
 CC probe having specificity for at least one other signal probe, that is
 CC specific for the target and detecting the reacted level. Sequences
 CC ACA61741-ACA61800 and ACD17023-ACD17041 represent DNA molecules used in
 CC the scope of the invention

XX SQ Sequence 12 BP; 1 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCATCG 15
 | |||||
 Db 3 GTCGGCATCG 12

RESULT 344

ABZ94944

ID ABZ94944 standard; DNA; 12 BP.

XX ABZ94944;

XX 17-OCT-2003 (first entry)

XX Human adenosine A1 receptor antisense fragment no.807.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 10186; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: the sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGATCG 15

Db 1 GCGGCGATCG 10

RESULT 345

ABZ94827
 ID ABZ94827 standard; DNA; 12 BP.

XX AC ABZ94827;

XX DT 17-OCT-2003 (first entry)

XX DE Human adenosine A1 receptor antisense fragment no.690.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 10069; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: the sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGCGCGC 11

Db 3 GCGGCGCGC 12

RESULT 346

ABD18675
 ID ABD18675 standard; DNA; 12 BP.

XX AC ABD18675;

XX DT 29-JUL-2004 (first entry)

XX DE Human adenosine A1 receptor oligonucleotide fragment 690.

XX KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ds.

XX OS Homo sapiens.

XX PN WO200285309-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013143.

XX PR 24-APR-2001; 2001US-0286036P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-093058/08.

XX PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX PS Claim 15; SEQ ID NO 10069; 763pp; English.

XX CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic, is a
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 12 BP; 2 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGGCGGC 11
 || |||||
 DB 3 GGAGGGCGGC 12
 RESULT 347
 ABD18792
 ID ABD18792 standard; DNA; 12 BP.
 XX
 AC ABD18792;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human adenosine A1 receptor oligonucleotide fragment 807.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; dB.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 10186; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 12 BP; 1 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GCGGGCATCG 15
 || |||||
 DB 1 GCGGGCATCG 10
 RESULT 348
 ADM87050
 ID ADM87050 standard; DNA; 12 BP.
 XX
 AC ADM87050;
 XX
 DT 07-APR-2005 (first entry)
 XX
 DE Protein labelling method sequence #252.
 XX
 KW DNA purification; protein engineering; diagnosis; ss.
 XX
 OS Unidentified.
 XX
 PN WO2004113530-A1.
 XX
 PD 29-DEC-2004.
 XX
 PF 18-JUN-2004; 2004WO-JP008953.
 XX
 PR 18-JUN-2003; 2003JP-00173634.
 XX
 PA (MITU) MITSUBISHI CHEM CORP.
 XX
 PI Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
 PI Hashimoto H, Sasaki T;

XX WPI; 2005-075248/08.
 DR Novel polynucleotide having ability to increase labeling efficiency of
 XX labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.
 PT
 XX Disclosure; Fig 21; 140pp; Japanese.
 PS
 XX The invention relates to a polynucleotide (I) for synthesizing labeled
 CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound
 CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling protein, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein.
 CC translating the gene template in the presence of the labeling compound
 CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a
 CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.
 XX
 SQ Sequence 12 BP; 0 A; 2 C; 10 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGC 11
 DB 2 GGCGGGCGGC 11
 RESULT 349
 ADW86942
 ID ADW86942 standard; DNA; 12 BP.
 AC
 XX ADW86942;
 XX
 DT 07-APR-2005 (first entry)
 DE Protein labelling method sequence #144.
 XX
 KW DNA purification; protein engineering; diagnosis; ss.
 XX Unidentified.
 OS
 XX WO2004113530-A1.
 PN
 XX 29-DEC-2004.
 PD
 XX 18-JUN-2004; 2004WO-JP008953.
 PF
 XX 18-JUN-2003; 2003JP-00173634.
 PR
 XX (MITU) MITSUBISHI CHEM CORP.
 PA
 XX Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
 PI Hashimoto H, Sasaki T;
 PI WPI; 2005-075248/08.
 DR
 XX Novel polynucleotide having ability to increase labeling efficiency of
 PT labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.

PT labeling compound.
 XX
 PS Disclosure; Fig 20; 140pp; Japanese.
 XX
 CC The invention relates to a polynucleotide (I) for synthesizing labeled
 CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound
 CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling protein, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein,
 CC translating the gene template in the presence of the labeling compound
 CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a
 CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.
 XX
 SQ Sequence 12 BP; 0 A; 2 C; 10 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GGCGGGCGGC 11
 DB 2 GGCGGGCGGC 11
 RESULT 350
 ADW86944
 ID ADW86944 standard; DNA; 12 BP.
 XX
 AC ADW86944;
 XX
 DT 07-APR-2005 (first entry)
 DE Protein labelling method sequence #146.
 XX
 KW DNA purification; protein engineering; diagnosis; ss.
 XX Unidentified.
 OS
 XX WO2004113530-A1.
 PN
 XX 29-DEC-2004.
 PD
 XX 18-JUN-2004; 2004WO-JP008953.
 PF
 XX 18-JUN-2003; 2003JP-00173634.
 PR
 XX (MITU) MITSUBISHI CHEM CORP.
 PA
 XX Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
 PI Hashimoto H, Sasaki T;
 PI WPI; 2005-075248/08.
 DR
 XX Novel polynucleotide having ability to increase labeling efficiency of
 PT labeling compound, useful for synthesizing labeled protein in presence of
 PT labeling compound.
 PT
 XX Disclosure; Fig 20; 140pp; Japanese.
 PS
 XX The invention relates to a polynucleotide (I) for synthesizing labeled

CC protein and having ability to increase labeling efficiency of labeling
 CC compound, where protein is produced by adding labeling compound to 3',
 CC terminal of sequence encoding target protein of gene template, where
 CC labeling compound has label portion and acceptor portion having compound
 CC capable of binding to C-terminus of label portion and translating gene
 CC template in presence of labeled compound. (I) is useful for producing a
 CC labeling compound, which involves preparing a gene template by adding (I)
 CC to the 3'-terminal of base sequence encoding the target protein,
 CC translating the gene template in the presence of the labeling compound
 CC containing acceptor portion and label portion, and obtaining protein
 CC synthesized in the translation system. The base sequence encoding the
 CC target protein either contains the termination codon or does not contain
 CC the termination codon. The labeling compound is added after the
 CC initiation of the translation. The labeled protein (LPI) is useful in a
 CC performance-analysis of a protein, which involves contacting the test
 CC substance with (LPI), and analyzing the interaction between the protein
 CC and the test substance. (I) has the ability to increase labeling
 CC efficiency of a labeling compound and thus effectively produces labeled
 CC protein. This sequence corresponds to a sequence used in the method of
 CC the invention.

XX
 SQ Sequence 12 BP; 0 A; 2 C; 10 G; 0 T; 0 U; 0 Other;
 Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGCGGCGG 10
 |||||
 Db 2 CGCGCGGGG 11

RESULT 351

AD223915/c
 ID AD223915 standard; DNA; 12 BP.

XX
 AC AD223915;

XX 16-JUN-2005 (first entry)

XX Human SNP detection related oligonucleotide #882.

XX ss; haplotype mapping; SNP detection; tumor; cytostatic; neoplasm;
 KW immune disorder; cardiovascular disease; metabolic disorder;
 KW respiratory disease; musculoskeletal disease; renal disease;
 KW nephrotropic; endocrine disease; genitourinary disease.

XX Homo sapiens.

XX WO2005030952-A1.

XX 07-APR-2005.

XX 30-SEP-2004; 2004WO-JP014784.

XX 30-SEP-2003; 2003JP-00342519.

XX 28-MAY-2004; 2004JP-00158717.

XX (RIKE) RIKEN KK.
 XX (STAG-) STAGEN CO LTD.
 XX (SEKI/) SEKINE A.
 XX (IIDA/) IIDA A.
 XX (SAIT/) SAITO S.

XX Sekine A, Iida A, Saito S, Nakamura Y, Kamatani N;

XX WPI; 2005-305936/31.

XX Analyzing haplotype, by detecting polymorphism in drug-related genes,
 PT electing common polymorphism (CP), building haplotype block using CP,
 PT specifying CP within block, specifying tag polymorphism from CP within
 block.

XX

PS Disclosure; SEQ ID NO 882; 1290pp; Japanese.

XX The invention relates to a method of analyzing haplotype, by detecting
 CC gene polymorphism in drug-related genes such as aryl acetylamine
 CC deacetylase, arylalkylamine N-acetyl transferase or ATP-binding cassette,
 CC sub-family A (ABC1), member 1. The method is useful for analyzing
 CC haplotype. The method is useful for estimating the sensitivity or disease
 CC of a medicine or a foreign material, for selecting medicine for
 CC preventing or treating diseases, for determining appropriate dosage of
 CC medicine for preventing or treating a disease, for analyzing a drug
 CC interaction, and for determining the related polymorphism relative to the
 CC sensitivity of the medicine, foreign material or disease. The diseases
 CC include malignant tumor, immune disorder circulatory disease, metabolic
 CC disease, kidney disease, respiratory disease and muscle associated
 CC disease. The method enables analysis of the individual differences
 CC related to the sensitivity of a medicine, using a haplotype, without
 CC using each single nucleotide polymorphism. The present sequence
 CC represents a human SNP detection related oligonucleotide.

XX Sequence 12 BP; 1 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGCGCGGCAT 13

|||||
 Db 11 CGCGCGCCAT 2

RESULT 352

AD223911/c
 ID AD223911 standard; DNA; 12 BP.

XX
 AC AD223911;

XX 16-JUN-2005 (first entry)

XX Human SNP detection related oligonucleotide #878.

XX ss; haplotype mapping; SNP detection; tumor; cytostatic; neoplasm;
 KW immune disorder; cardiovascular disease; metabolic disorder;
 KW respiratory disease; musculoskeletal disease; renal disease;
 KW nephrotropic; endocrine disease; genitourinary disease.

XX Homo sapiens.

XX WO2005030952-A1.

XX 07-APR-2005.

XX 30-SEP-2004; 2004WO-JP014784.

XX 30-SEP-2003; 2003JP-00342519.

XX 28-MAY-2004; 2004JP-00158717.

XX (RIKE) RIKEN KK.
 XX (STAG-) STAGEN CO LTD.
 XX (SEKI/) SEKINE A.
 XX (IIDA/) IIDA A.
 XX (SAIT/) SAITO S.

XX Sekine A, Iida A, Saito S, Nakamura Y, Kamatani N;

XX WPI; 2005-305936/31.

XX Analyzing haplotype, by detecting polymorphism in drug-related genes,
 PT electing common polymorphism (CP), building haplotype block using CP,
 PT specifying CP within block, specifying tag polymorphism from CP within
 block.

XX Disclosure; SEQ ID NO 878; 1290pp; Japanese.

XX

CC The invention relates to a method of analyzing haplotype, by detecting
 CC gene polymorphism in drug-related genes such as aryl acetamide
 CC deacetylase, arylalkylamine N-acetyl transferase or Arp-binding cassette,
 CC sub-family A (ABCI), member 1. The method is useful for analyzing
 CC haplotype. The method is useful for estimating the sensitivity or disease
 CC of a medicine or a foreign material, for selecting medicine for
 CC preventing or treating diseases, for determining appropriate dosage of
 CC medicine for preventing or treating a disease, for analyzing a drug
 CC interaction, and for determining the related polymorphism relative to the
 CC sensitivity of the medicine, foreign material or disease. The diseases
 CC include malignant tumor, immune disorder circulatory disease, metabolic
 CC disease, kidney disease, respiratory disease and muscle associated
 CC disease. The method enables analysis of the individual differences
 CC related to the sensitivity of a medicine, using a haplotype, without
 CC using each single nucleotide polymorphism. The present sequence
 CC represents a human SNP detection related oligonucleotide.

XX
 XX
 SQ Sequence 12 BP; 1 A; 5 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CGGGCGGCAT 13
 DB 11 CGGGCGGCAT 2

RESULT 353
 ADY89227
 ID ADY89227 standard; RNA; 12 BP.
 AC ADY89227;
 XX
 DT 16-JUN-2005 (first entry)
 XX
 DE VEGF siRNA SEQ ID NO 2263.
 XX
 KW ss; siRNA; short interfering RNA; RNA interference; gene silencing; VEGF;
 KW pharmaceutical; cancer; neoplasm; Cytostatic.
 XX
 OS Synthetic.
 XX
 XX WO2005028649-A1.
 XX
 PD 31-MAR-2005.
 XX
 XX 16-SEP-2004; 2004WO-US030488.
 XX
 PR 16-SEP-2003; 2003US-00664767.
 PR 16-SEP-2003; 2003US-00665255.
 PR 23-SEP-2003; 2003US-00670011.
 PR 23-OCT-2003; 2003US-00693059.
 PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 26-JAN-2004; 2004US-00764957.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 23-APR-2004; 2004US-00831620.
 PR 30-APR-2004; 2004US-00013456.
 PR 11-MAY-2004; 2004US-00844076.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 XX
 XX Jadhav V, Kossen K, Zinnen S, Vaish N, Mcswiggen J;
 XX WPI; 2005-254128/36.
 DR
 XX New multifunctional siNA molecule that directs cleavage of the first and
 PT second VEGF or VEGFR target sequences via RNA interference, useful in
 PT preparing a composition for treating cell proliferative disorders e.g.

PT cancers.
 XX
 XX Disclosure; SEQ ID NO 2263; 396pp; English.
 PS
 CC The invention relates to a multifunctional siNA molecule comprising a
 CC structure having Formula MF-III and which directs cleavage of the first
 CC and second VEGF or VEGFR target sequences via RNA interference. The
 CC multifunctional siNA molecule is useful in preparing a pharmaceutical
 CC composition for treating cell proliferative disorders, e.g. cancer. The
 CC present sequence represents a VEGF siRNA.

XX
 SQ Sequence 12 BP; 0 A; 4 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGGC 11
 DB 1 GGCGGGCGGC 10

RESULT 354
 AEB43971/c
 ID AEB43971 standard; DNA; 12 BP.
 XX
 AC AEB43971;
 XX
 DT 08-SEP-2005 (first entry)
 XX
 DE Peptide nucleic acid oligonucleotide, SEQ ID 7.
 XX
 KW DNA detection; RNA detection; peptide nucleic acid; PNA; ss.
 XX
 OS Synthetic.
 XX
 XX US2005136442-A1.
 XX
 PD 23-JUN-2005.
 XX
 PF 17-SEP-2004; 2004US-00944920.
 XX
 PR 21-DEC-1998; 98US-00217472.
 PR 12-MAR-2002; 2002US-00096718.
 XX
 XX (NANO-) NANOGEN INC.
 XX
 XX Collins ML;
 XX
 XX WPI; 2005-540030/55.
 DR
 XX Multiplex assay of target molecules by passing the sample over an
 PT apparatus having at least one sample preparation layer, useful for
 PT carrying out integrated clinical diagnostics and nucleic acid
 PT hybridization reactions.
 XX
 PS Example 1; SEQ ID NO 7; 37pp; English.

XX
 CC The present invention relates to a method for multiplex detection of
 CC target molecules in a sample. The method comprises passing the sample
 CC over an apparatus comprising at least one sample preparation layer,
 CC labeling the captured target molecules with a light emitting labeling
 CC entity, and detecting the light emitted to detect the presence of
 CC captured target molecules. The method is useful for integrating sample
 CC preparation and multiplex assay of high volume samples for the presence
 CC of nucleic acid and antigen targets, and for carrying out fully
 CC integrated clinical diagnostics, combining sample preparation, nucleic
 CC acid hybridization reactions and antibody/antigen reactions. The sample
 CC is contacted with a number of mediator probes prior to passing through
 CC the apparatus, and is contacted with a label mediator probe that
 CC specifically binds the target molecule, a preamplifier molecule that
 CC specifically binds the label mediator probe, at least one amplifier
 CC molecule that specifically binds the preamplifier probe, a label probe

CC that specifically binds the preamplifier, and a label that specifically
 CC binds the label probe and that emits light. The target molecules are
 CC nucleic acids, antigens or antibodies, and/or a bacterial target molecule
 CC or a viral target molecule. AEB43965-AEB43984 are peptide nucleic acid
 CC sequences (PNA) which contains four lysine residues, and AEB43985-
 CC AEB44004 are the DNA complement sequences for the PNAs, which were used
 CC to illustrate the invention.

XX Sequence 12 BP; 4 A; 4 C; 3 G; 1 T; 0 U; 0 Other;
 SQ Best Local Similarity 52.5%; Score 8.4; DB 1; Length 12;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGCGCATCG 15
 | | | | | | | |
 Db 10 GTCGCGCATCG 1

RESULT 355
 AEB43991
 ID AEB43991 standard; DNA; 12 BP.

AC AEB43991;

XX 08-SEP-2005 (first entry)

DT Oligonucleotide, SEQ ID 27.

DE DNA detection; RNA detection; ss.

KW Synthetic.

OS US2005136442-A1.

XX 23-JUN-2005.

XX 17-SEP-2004; 2004US-00944920.

XX 21-DEC-1998; 98US-00217472.

PR 12-MAR-2002; 2002US-00096718.

XX (NANO-) NANOGEN INC.

PA Collins ML;

XX WPI; 2005-540030/55.

DR Multiplex assay of target molecules by passing the sample over an
 XX apparatus having at least one sample preparation layer, useful for
 PT carrying out integrated clinical diagnostics and nucleic acid
 PT hybridization reactions.

XX Example 1; SEQ ID NO 27; 37pp; English.

CC The present invention relates to a method for multiplex detection of
 CC target molecules in a sample. The method comprises passing the sample
 CC over an apparatus comprising at least one sample preparation layer,
 CC labeling the captured target molecules with a light emitting labeling
 CC entity, and detecting the light emitted to detect the presence of
 CC captured target molecules. The method is useful for integrating sample
 CC preparation and multiplex assay of high volume samples for the presence
 CC of nucleic acid and antigen targets, and for carrying out fully
 CC integrated clinical diagnostics, combining sample preparation, nucleic
 CC acid hybridization reactions and antibody/antigen reactions. The sample
 CC is contacted with a number of mediator probes prior to passing through
 CC the apparatus, and is contacted with a label mediator probe that
 CC specifically binds the target molecule, a preamplifier molecule that
 CC specifically binds the label mediator probe, at least one amplifier
 CC molecule that specifically binds the preamplifier probe, a label probe
 CC that specifically binds the preamplifier, and a label that specifically
 CC binds the label probe and that emits light. The target molecules are
 CC nucleic acids, antigens or antibodies, and/or a bacterial target molecule

CC or a viral target molecule. AEB43965-AEB43984 are peptide nucleic acid
 CC sequences (PNA) which contains four lysine residues, and AEB43985-
 CC AEB44004 are the DNA complement sequences for the PNAs, which were used
 CC to illustrate the invention.

XX Sequence 12 BP; 1 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 52.5%; Score 8.4; DB 1; Length 12;
 Best Local Similarity 90.0%; Pred. No. 2.2e+02;
 Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGCGCATCG 15
 | | | | | | | |
 Db 3 GTCGCGCATCG 12

RESULT 356
 AAX86209/C
 ID AAX86209 standard; DNA; 10 BP.

XX AAX86209;

XX 22-SEP-1999 (first entry)

DT SAGE tag used to identify transcripts which are enhanced by p53.

DE p53 transcription tag; p53 status; cancer; cytotoxicity; carcinogenicity;
 KW neoplastic; p53 binding site; PIG-3 promoter; SAGE tag; ss.

XX Homo sapiens.

XX WO9914356-A2.

XX 25-MAR-1999.

XX 17-SEP-1998; 98WO-US019300.

XX 17-SEP-1997; 97US-0059153P.

PR 30-MAR-1998; 98US-0079817P.

XX (UYJO) UNIV JOHNS HOPKINS.

XX Vogelstein B, Kinzler KW, Polyak K;

XX WPI; 1999-443793/37.

PT Use of p53 transcription tags to determine p53 status in, e.g. cancer
 PT diagnosis.

XX Example 1; Page 26; 73pp; English.

CC The specification describes the use of p53 transcription tags for
 CC developing products to determine p53 status, to diagnose cancer and to
 CC evaluate cytotoxicity or carcinogenicity of a test agent. A method for
 CC diagnosing cancer or determining p53 status in a sample suspected for
 CC being neoplastic comprises comparing the level of transcription of an RNA
 CC transcript in a first sample (s1) of a first tissue (t1) to the level of
 CC transcription of the transcript in a second sample (s2) of a second
 CC tissue (s2), where s1 is suspected of being neoplastic and s2 is a normal
 CC human tissue (of the same type) and the transcript is identified by a tag
 CC ; and categorizing s1 as neoplastic or as having a mutant p53 when
 CC transcription is found to be the same or lower in the first, than in s2.
 CC The methods and products can be used to determine p53 status, to diagnose
 CC cancer and to evaluate cytotoxicity or carcinogenicity of a test agent.
 CC AAX86201-33 represent SAGE tags used to identify transcripts which are
 CC enhanced by p53

XX Sequence 10 BP; 1 A; 6 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY      1 CGCGGGC 8
Db      9 CGCGGGC 2

RESULT 357
AAZ79225
ID AAZ79225 standard; DNA; 10 BP.
XX
AC AAZ79225;
XX
DT 10-APR-2000 (first entry)
XX
DE Human dendritic cell SAGE tag, SEQ ID NO:1653.
XX
KW SAGE tag; serial analysis of gene expression; antigen-presenting cell;
KW APC; monocyte-derived dendritic cell; differential gene expression;
KW immunostimulatory cofactor; costimulatory factor; CTL;
KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.
XX
OS Homo sapiens.
XX
PN WO9965924-A2.
XX
PD 23-DEC-1999.
XX
PF 18-JUN-1999; 99WO-US013800.
XX
PR 19-JUN-1998; 98US-0089833P.
PR 19-JUN-1998; 98US-0089844P.
PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089878P.
PR 19-JUN-1998; 98US-008991P.
PR 19-JUN-1998; 98US-0089992P.
PR 19-JUN-1998; 98US-0089993P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0089999P.
PR 19-JUN-1998; 98US-0090000P.
PR 19-JUN-1998; 98US-0090035P.
PR 19-JUN-1998; 98US-0090036P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
PR 19-JUN-1998; 98US-0090042P.
PR 19-JUN-1998; 98US-0090043P.
PR 19-JUN-1998; 98US-0090044P.
PR 19-JUN-1998; 98US-0090045P.
PR 19-JUN-1998; 98US-0090047P.
PR 19-JUN-1998; 98US-0090048P.
PR 19-JUN-1998; 98US-0090072P.
PR 19-JUN-1998; 98US-0090076P.
PR 19-JUN-1998; 98US-0090077P.
PR 19-JUN-1998; 98US-0090078P.
PR 19-JUN-1998; 98US-0090079P.
PR 19-JUN-1998; 98US-0090080P.
PR 08-DEC-1998; 98US-0111715P.
XX
(GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
PI Roberts BL, Shankara S;
XX
XX WPI; 2000-106077/09.
XX
XX Isolated polynucleotides differentially expressed in antigen-presenting
XX cells, useful in gene vaccines against cancer.
XX
XX Claim 1; Page 112; 130pp; English.
XX
XX Sequences AAZ77573-279709 represent SAGE (serial analysis of gene
XX expression) tags used to identify mRNA transcripts encoding
CC

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```

CC immunostimulatory cofactor proteins which are preferentially or
CC differentially expressed in monocyte-derived dendritic cells compared
CC with monocytes. Some of the transcripts correspond to known genes or ESTs
CC (expressed sequence tags) which were previously unknown to be
CC preferentially or differentially expressed in dendritic cells, while
CC other transcripts correspond to novel genes. Antigen-presenting cell
CC (APC)-associated costimulatory factors play an important role in the
CC activation of the cytotoxic immune response, particularly against tumour
CC cells. Tumour antigen presentation via the MHC (major histocompatibility
CC complex) and subsequent recognition by T-cell receptors is alone
CC insufficient to activate a robust cytotoxic immune response that can lyse
CC the tumour cells, immunostimulatory cofactors also being required for
CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid
CC sequences identified using the SAGE tags have several potential uses.
CC They may be used in vaccines to induce an immune response, particularly
CC against a tumour antigen; to modulate the genotype of an APC; to screen
CC for agents that modulate expression of differentially expressed genes in
CC an APC; and as hybridisation probes/amplification primers for the
CC diagnosis, prognosis and monitoring of diseases related to abnormal
CC expression of these genes. Detection of the dendritic cell differentially
CC expressed genes, or of their encoded proteins, can be used to identify
CC cells as belonging to the monocyte lineage. Cells containing these genes
CC can be used in active immunotherapy (or to stimulate production of a
CC population of antigen-specific effector cells) and vectors containing
CC them are used in gene therapy. Co-administration of tumour antigens and
CC APC-associated costimulatory factors ensures adequate antigen
CC presentation to endogenous APCs and upregulates the APCs for the
CC presentation of co-stimulatory signals, migration to T cell-rich sites,
CC secretion of T cell growth factors and secretion of chemokines for
CC recruitment of immune effector cells
XX
SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      9 GGCATCGT 16
Db      1 GGCATCGT 8

RESULT 358
AAZ79814
ID AAZ79814 standard; DNA; 10 BP.
XX
AC AAZ79814;
XX
DT 10-APR-2000 (first entry)
XX
DE Human dendritic cell SAGE tag, SEQ ID NO:1242.
XX
KW SAGE tag; serial analysis of gene expression; antigen-presenting cell;
KW APC; monocyte-derived dendritic cell; differential gene expression;
KW immunostimulatory cofactor; costimulatory factor; CTL;
KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.
XX
OS Homo sapiens.
XX
PN WO9965924-A2.
XX
PD 23-DEC-1999.
XX
PF 18-JUN-1999; 99WO-US013800.
XX
PR 19-JUN-1998; 98US-0089833P.
PR 19-JUN-1998; 98US-0089844P.
PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089878P.
PR 19-JUN-1998; 98US-008991P.
PR 19-JUN-1998; 98US-0089992P.
PR 19-JUN-1998; 98US-0089993P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0089999P.

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PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0089999P.
PR 19-JUN-1998; 98US-0090000P.
PR 19-JUN-1998; 98US-0090003P.
PR 19-JUN-1998; 98US-00900036P.
PR 19-JUN-1998; 98US-00900039P.
PR 19-JUN-1998; 98US-00900040P.
PR 19-JUN-1998; 98US-00900041P.
PR 19-JUN-1998; 98US-00900042P.
PR 19-JUN-1998; 98US-00900043P.
PR 19-JUN-1998; 98US-00900044P.
PR 19-JUN-1998; 98US-00900045P.
PR 19-JUN-1998; 98US-00900047P.
PR 19-JUN-1998; 98US-00900048P.
PR 19-JUN-1998; 98US-00900072P.
PR 19-JUN-1998; 98US-00900076P.
PR 19-JUN-1998; 98US-00900077P.
PR 19-JUN-1998; 98US-00900078P.
PR 19-JUN-1998; 98US-00900079P.
PR 19-JUN-1998; 98US-00900080P.
PR 08-DEC-1998; 98US-01111715P.
XX
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
XX WPI; 2000-106077/09.
DR
XX
XX Isolated polynucleotides differentially expressed in antigen-presenting
PT cells, useful in gene vaccines against cancer.
PT
XX
XX Claim 1; Page 100; 130pp; English.
XX
XX Sequences AAZ77573-Z79709 represent SAGE (serial analysis of gene
CC expression) tags used to identify mRNA transcripts encoding
CC immunostimulatory cofactor proteins which are preferentially or
CC differentially expressed in monocyte-derived dendritic cells compared
CC with monocytes. Some of the transcripts correspond to known genes or ESTs
CC (expressed sequence tags) which were previously unknown to be
CC preferentially or differentially expressed in dendritic cells, while
CC other transcripts correspond to novel genes. Antigen-presenting cell
CC (APC)-associated costimulatory factors play an important role in the
CC activation of the cytotoxic immune response, particularly against tumour
CC cells. Tumour antigen presentation via the MHC (major histocompatibility
CC complex) and subsequent recognition by T-cell receptors is alone
CC insufficient to activate a robust cytotoxic immune response that can lyse
CC the tumour cells, immunostimulatory cofactors also being required for
CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid
CC sequences identified using the SAGE tags have several potential uses.
CC They may be used in vaccines to induce an immune response, particularly
CC against a tumour antigen; to modulate the immune response, particularly
CC for agents that modulate expression of differentially expressed genes in
CC an APC; and as hybridisation probes/amplification primers for the
CC diagnosis, prognosis and monitoring of diseases related to abnormal
CC expression of these genes. Detection of the dendritic cell differentially
CC expressed genes, or of their encoded proteins, can be used to identify
CC cells as belonging to the monocyte lineage. Cells containing these genes
CC can be used in active immunotherapy (or to stimulate production of a
CC population of antigen-specific effector cells) and vectors containing
CC them are used in gene therapy. Co-administration of tumour antigens and
CC APC-associated costimulatory factors ensures adequate antigen
CC presentation to endogenous APCs and upregulates the APCs for the
CC secretion of co-stimulatory signals, migration to T cell-rich sites,
CC recruitment of T cell growth factors and secretion of chemokines for
CC recruitment of immune effector cells
XX
XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ

```

Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Qy 2 GGCGGGCG 9
Db 3 GGCGGGCG 10
RESULT 359
AAZ85699/c
ID AAZ85699 standard; DNA; 10 BP.
XX
XX AC AAZ85699;
XX DT 07-APR-2000 (first entry)
XX XX Metastatic breast tumour cell downregulated transcript tag #4933.
XX DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX KW non-metastatic breast tumour tissue; gene therapy; anticancer;
XX KW antimetastatic; vaccine; diagnosis; sg.
XX OS Homo sapiens.
XX PN WO9965928-A2.
XX XX 23-DEC-1999.
XX PF 18-JUN-1999; 99WO-US013647.
XX PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-00900039P.
PR 19-JUN-1998; 98US-00900040P.
PR 19-JUN-1998; 98US-00900041P.
XX
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
XX Claim 1; Page 190; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC vaccines; for diagnosing breast cancer and for raising specific
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
XX Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
SQ

```

Query Match 50.0%; Score 8; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 2.1e+02; Mismatches 0; Gaps 0;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 CGGGCGGC 11
| | | | |
Db 9 CGGGCGGC 2

RESULT 360
AAZ82808/c
ID AAZ82808 standard; DNA; 10 BP.

XX AC AAZ82808;

XX DT 07-APR-2000 (first entry)

XX DE Metastatic breast tumour cell upregulated transcript tag #2042.

XX DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.

XX OS Homo sapiens.

XX PN WO9965928-A2.

XX PD 23-DEC-1999.

XX PF 18-JUN-1999; 99WO-US013647.

XX PR 19-JUN-1998; 98US-0089853P.

XX PR 19-JUN-1998; 98US-0089997P.

XX PR 19-JUN-1998; 98US-0090039P.

XX PR 19-JUN-1998; 98US-0090040P.

XX PA (GENZ) GENZYME CORP.

XX PA (ROBE/) ROBERTS B L.

XX PA (SHAN/) SHANKARA S.

XX PI Roberts BL, Shankara S;

XX WPI; 2000-106079/09.

XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.

XX PS Claim 1; Page 114; 219pp; English.

XX CC AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC vaccines for diagnosing breast cancer and for raising specific
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy

XX SQ Sequence 10 BP; 1 A; 6 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGGGCGGC 8
| | | | |
Db 9 CGGGCGGC 2

RESULT 361

AAZ84490

ID AAZ84490 standard; DNA; 10 BP.

XX AC AAZ84490;

XX DT 07-APR-2000 (first entry)

XX DE Metastatic breast tumour cell downregulated transcript tag #3724.

XX DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.

XX OS Homo sapiens.

XX PN WO9965928-A2.

XX PD 23-DEC-1999.

XX PF 18-JUN-1999; 99WO-US013647.

XX PR 19-JUN-1998; 98US-0089853P.

XX PR 19-JUN-1998; 98US-0089997P.

XX PR 19-JUN-1998; 98US-0090039P.

XX PR 19-JUN-1998; 98US-0090040P.

XX PR 19-JUN-1998; 98US-0090041P.

XX PA (GENZ) GENZYME CORP.

XX PA (ROBE/) ROBERTS B L.

XX PA (SHAN/) SHANKARA S.

XX PI Roberts BL, Shankara S;

XX WPI; 2000-106079/09.

XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.

XX PS Claim 1; Page 158; 219pp; English.

XX CC AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC vaccines for diagnosing breast cancer and for raising specific
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy

XX Velculescu VE, Vogelstein B, Kinzler KW;
 XX WPI; 2001-367706/38.
 XX New isolated polynucleotides, useful for identifying specific cell type,
 PT such as cancer cell, comprises transcriptomes expressed in particular
 PT cell types.
 XX Claim 13; Page 53; 94pp; English.
 XX The present invention describes a method of identifying the type of cell
 CC in a sample, involving determining which of the sequences AAH63161-
 CC AAH64724 is expressed by the cell. The transcriptomes described in the
 CC invention are cell-type specific, cancer specific or ubiquitously
 CC expressed in humans. They can also be used to screen for drugs, reduce
 CC cancer specific gene expression, standardise expression and restore the
 CC function of a diseased cell or tissue. The present sequence is one of the
 CC transcriptomes described in the exemplification of the invention
 XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGGCG 9
 DB 3 GCGGGCG 10
 |||||

RESULT 365
 ABA06216
 ID ABA06216 standard; cDNA; 10 BP.
 XX
 AC ABA06216;
 XX
 DT 10-JAN-2002 (first entry)
 XX
 XX Human normal hepatocyte expression gene cDNA, SEQ ID NO: 193.
 DE Human; hepatocyte; gene expression; hepatopathy; ss.
 XX Homo sapiens.
 OS
 XX JP2001211883-A.
 PN
 XX 07-AUG-2001.
 PD
 XX 31-JAN-2000; 2000JP-00023170.
 PF
 XX 31-JAN-2000; 2000JP-00023170.
 PR
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 PA
 XX WPI; 2001-629566/73.
 DR
 XX Human normal hepatocyte expression gene group.
 PT
 XX Claim 1; Page 9; 26pp; Japanese.
 PS
 XX The invention relates to a human normal hepatocyte expression gene group
 CC comprising 200 genes in the human normal hepatocyte. The cDNA of each
 CC gene comprises one of 200 fully defined nucleotide sequences as given in
 CC the specification. The gene group and the cDNAs corresponding to each of
 CC the genes in the group are useful in the diagnosis and treatment of human
 CC hepatopathy. The present sequence is a cDNA corresponding to a gene
 CC expressed by normal human hepatocytes
 XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGGCG 9
 DB 3 GCGGGCG 10
 |||||

RESULT 366
 AAF39166/c
 ID AAF39166 standard; DNA; 10 BP.
 XX
 AC AAF39166;
 XX
 DT 23-MAR-2001 (first entry)
 XX
 DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:5905.
 XX
 KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
 KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
 KW serial analysis of gene expression; antifungal; tag; identification;
 KW linker; PCR primer; ds.
 XX
 OS Saccharomyces cerevisiae.
 XX
 PN WO200077214-A2.
 XX
 PD 21-DEC-2000.
 XX
 PF 14-JUN-2000; 2000WO-US016223.
 XX
 PR 16-JUN-1999; 99US-00335032.
 XX
 XX (UYJO) UNIV JOHNS HOPKINS.
 PA
 XX Velculescu V, Vogelstein B, Kinzler K;
 PI
 XX WPI; 2001-061874/07.
 DR
 XX Yeast gene coding sequences comprising NORF genes with serial analysis of
 PT gene expression (SAGE) tags, useful for studying, monitoring and
 PT affecting phases of the cell cycle.
 XX
 XX Example; Page 210; 419pp; English.
 PS
 XX The present invention describes an isolated DNA molecule comprising a
 CC coding sequence of a yeast gene selected from a group of 745 NORF (not
 CC previously assigned open reading frame; or nonannotated ORF) genes
 CC comprising a SAGE (serial analysis of gene expression) tag. Also
 CC described are: (1) a method (M1) of using NORF genes to affect the cell
 CC cycle comprising administering a NORF gene whose expression varies by at
 CC least 10% between any two phases of the cell cycle selected from log
 CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
 CC antifungal drugs comprising: (a) contacting a test substance with a yeast
 CC cell; and (b) monitoring expression of a NORF gene whose expression
 CC varies as in M1, where a test substance which modifies the expression of
 CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
 CC identifying human genes which are involved in cell cycle progression
 CC comprising contacting human DNA with a probe which comprises at least 10
 CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
 CC and (4) a method (M4) for identifying a candidate drug as a member of a
 CC class of drugs having a characteristic effect on gene expression in a
 CC yeast cell comprising contacting a yeast cell with a candidate drug and
 CC monitoring expression in the yeast cell of at least 1 NORF gene whose
 CC expression is affected by the class of drugs. The NORF genes may be used
 CC to study, monitor and affect phases of the cell cycle, the differentially
 CC expressed genes may be used as markers of phases of the cell cycle. The
 CC methods may be used to identify candidate drugs which affect the cell
 CC cycle and for identification of antifungal drugs. AAF3268 to AAF44064
 CC represent SAGE tags used in the exemplification of the present invention.
 CC AAF3262 to AAF3267 represent linkers and PCR primers used in the SAGE
 CC method, in the exemplification of the present invention
 XX
 XX Sequence 10 BP; 3 A; 4 C; 2 G; 1 T; 0 U; 0 Other;
 SQ

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGGCG 9
 DB 3 GCGGGCG 10
 |||||

RESULT 366
 AAF39166/c
 ID AAF39166 standard; DNA; 10 BP.
 XX
 AC AAF39166;
 XX
 DT 23-MAR-2001 (first entry)
 XX
 DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:5905.
 XX
 KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
 KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
 KW serial analysis of gene expression; antifungal; tag; identification;
 KW linker; PCR primer; ds.
 XX
 OS Saccharomyces cerevisiae.
 XX
 PN WO200077214-A2.
 XX
 PD 21-DEC-2000.
 XX
 PF 14-JUN-2000; 2000WO-US016223.
 XX
 PR 16-JUN-1999; 99US-00335032.
 XX
 XX (UYJO) UNIV JOHNS HOPKINS.
 PA
 XX Velculescu V, Vogelstein B, Kinzler K;
 PI
 XX WPI; 2001-061874/07.
 DR
 XX Yeast gene coding sequences comprising NORF genes with serial analysis of
 PT gene expression (SAGE) tags, useful for studying, monitoring and
 PT affecting phases of the cell cycle.
 XX
 XX Example; Page 210; 419pp; English.
 PS
 XX The present invention describes an isolated DNA molecule comprising a
 CC coding sequence of a yeast gene selected from a group of 745 NORF (not
 CC previously assigned open reading frame; or nonannotated ORF) genes
 CC comprising a SAGE (serial analysis of gene expression) tag. Also
 CC described are: (1) a method (M1) of using NORF genes to affect the cell
 CC cycle comprising administering a NORF gene whose expression varies by at
 CC least 10% between any two phases of the cell cycle selected from log
 CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
 CC antifungal drugs comprising: (a) contacting a test substance with a yeast
 CC cell; and (b) monitoring expression of a NORF gene whose expression
 CC varies as in M1, where a test substance which modifies the expression of
 CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
 CC identifying human genes which are involved in cell cycle progression
 CC comprising contacting human DNA with a probe which comprises at least 10
 CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
 CC and (4) a method (M4) for identifying a candidate drug as a member of a
 CC class of drugs having a characteristic effect on gene expression in a
 CC yeast cell comprising contacting a yeast cell with a candidate drug and
 CC monitoring expression in the yeast cell of at least 1 NORF gene whose
 CC expression is affected by the class of drugs. The NORF genes may be used
 CC to study, monitor and affect phases of the cell cycle, the differentially
 CC expressed genes may be used as markers of phases of the cell cycle. The
 CC methods may be used to identify candidate drugs which affect the cell
 CC cycle and for identification of antifungal drugs. AAF3268 to AAF44064
 CC represent SAGE tags used in the exemplification of the present invention.
 CC AAF3262 to AAF3267 represent linkers and PCR primers used in the SAGE
 CC method, in the exemplification of the present invention
 XX
 XX Sequence 10 BP; 3 A; 4 C; 2 G; 1 T; 0 U; 0 Other;
 SQ


```

Query Match          50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 GGCATCGT 16
DB 10 GGCATCGT 3

RESULT 367
AAH76352/c
ID AAH76352 standard; DNA; 10 BP.
XX
AC AAH76352;
XX
DT 29-OCT-2001 (first entry)
XX
DE Z. mays Ms45 promoter deletion mutant fragment LS12.
XX
KW Ms45; male tissue; regulatory region; transcription; male fertility;
KW hybrid seed; promoter; ss.
XX
OS Zea mays.
XX
PN WO200160997-A2.
XX
PD 23-AUG-2001.
XX
PF 13-FEB-2001; 2001WO-US004527.
XX
PR 15-FEB-2000; 2000US-00504487.
XX
PA (PION-) PIONEER HI-BRED INT INC.
PI Albertsen MC, Fox TW, Garmaat CW, Huffman G, Kendall TL;
XX
XX WPI; 2001-514772/56.
XX
PT A male tissue-preferred regulatory region comprising nucleotide sequences
PT essential for initiating transcription of the Ms45 gene useful for
PT mediating fertility in a male plant.
XX
PS Example 5; Fig 8; 50pp; English.
XX
CC The invention provides a male tissue-preferred regulatory region (I)
CC comprising nucleotide sequences essential for initiating transcription of
CC the MS45 gene. A method of mediating male fertility in a plant is
CC provided that involves introducing an expression vector comprising a
CC promoter operably linked to (I) into a plant where the exogenous gene
CC impacts male fertility of the plant and (I) controls expression of the
CC exogenous gene. A method of producing hybrid seeds is also provided.
CC Sequences AAH76341-355 represent a series of 5' deletions in the Ms45
CC promoter region, used for determining the essential region of MS45
XX
XX
XX Sequence 10 BP; 0 A; 5 C; 5 G; 0 T; 0 U; 0 Other;

Query Match          50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGCGGGC 8
DB 10 CGGCGGGC 3

RESULT 368
AAI72712/c
ID AAI72712 standard; DNA; 10 BP.
XX
AC AAI72712;
XX

```

```

DT 03-JUL-2002 (first entry)
XX
DE Complement #2 of Human c-myc antisense sequence.
XX
KW Antisense; analyte molecule; AM; probe; complementary region; c-myc; ss.
XX
OS Homo sapiens.
XX
PN WO200218656-A2.
XX
PD 07-MAR-2002.
XX
PF 30-AUG-2001; 2001WO-US027129.
XX
PR 30-AUG-2000; 2000US-0229245P.
XX
PA (AVIB-) AVI BIOPHARMA INC.
XX
PI Weller DD, Reddy TM;
XX
XX WPI; 2002-362184/39.
XX
PT Analyzing a population of oligomeric analyte molecules e.g. morpholino
PT oligomers, peptide nucleic acids, by resolving duplexes of such molecules
PT with complementary or near-complementary DNA or charged DNA analogs.
XX
PS Disclosure; Fig 4B; 37pp; English.
XX
CC The sequences given in AAI72704-13 are antisense oligonucleotides which
CC were used in the method of the invention. The method of the invention
CC comprises analysing a population of oligomeric analyte molecules (AMs)
CC composed of linked subunits of which at least 50% are uncharged, by
CC applying a mixture of AMs and probe molecules to a charge-bearing
CC separation medium, so that complementary or near-complementary regions
CC of probe and at least one AM are hybridized to form a mixture of species
CC and separating the species within the medium. The method is useful for
CC analysing populations of oligomeric analyte molecules such as peptide
CC nucleic acids, phosphorilester oligonucleotides, methylphosphonate
CC oligonucleotides, morpholino oligomers and chimeras of any member of this
CC group with another member of with DNA, 2'-O-alkyl RNA or 2'-O-allyl RNA,
CC in particular morpholino oligomers having intersubunit linkages such as
CC phosphoramidate and phosphorodiamidate (claimed). The method is suitable
CC for separating, detecting, quantitating and/or isolating predominantly
CC uncharged oligonucleotide analogues. This sequence represents a fragment
CC of the complement of AAI72704 which is antisense to nucleotides 2551-
CC 2570 of the human c-myc sequence given in Genbank Acc. No. X00196. This
CC fragment is charged
XX
XX Sequence 10 BP; 2 A; 4 C; 3 G; 1 T; 0 U; 0 Other;

Query Match          50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 GGCATCGT 16
DB 10 GGCATCGT 3

RESULT 369
ABQ71300
ID ABQ71300 standard; DNA; 10 BP.
XX
AC ABQ71300;
XX
DT 28-AUG-2002 (first entry)
XX
DE Zinc finger protein related oligonucleotide target SEQ ID NO:101.
XX
KW Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.
XX
OS Homo sapiens.
OS Synthetic.

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XX WO200242459-A2.
PN
XX
XX 30-MAY-2002.
XX
XX 20-NOV-2001; 2001WO-US043438.
XX
XX 20-NOV-2000; 2000US-00716637.
PR
XX
XX (SANG-) SANGAMO BIOSCIENCES INC.
PA
XX
XX Liu Q;
PI
XX WPI; 2002-500284/53.
DR
XX
XX New zinc finger protein that binds to target site, useful in studying
PT gene function and for human therapeutics and plant engineering, comprises
PT first, second and third zinc fingers, ordered from N- to C-terminus.
PT
XX
XX Example 1; Page 38; 8lpp; English.
PS
XX The present invention describes a zinc finger protein (I) that binds to a
CC target site, comprising a first (F1), a second (F2), and a third (F3)
CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the
CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),
CC and a third (S3) target subsite. Also described are: (1) a polypeptide
CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and
CC (3) designing (M) (I) involves selecting the F1 zinc finger such that it
CC binds to the S1 target subsite, selecting the F2 zinc finger such that it
CC binds to the S2 target subsite, and selecting the F3 zinc finger such
CC that it binds to the S3 target subsite, thus designing (I) that binds to
CC a target site. (I) is useful for recognition of triplet target subsites
CC having the nucleotide G in the 5'-most position of the subsite. (I) is
CC useful in studying gene function, and for human therapeutics and plant
CC engineering. (I), (II) or (III) is useful in therapeutic methods to
CC modulate the expression of a target region within a subject, in
CC diagnostic methods for sequence specific detection of target nucleic acid
CC in a sample, and in assays to determined the phenotype and function of
CC gene expression. (I) has improved affinity and specificity for their
CC target sequences, as well as enhanced biological activity. ABQ71213 to
CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc
CC finger peptides which are given in the exemplification of the present
CC invention
XX
XX Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;
SQ
Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGGCGG 10
DB 1 GCGGGCGG 8

RESULT 370
ABQ71696
ID ABQ71696 standard; DNA; 10 BP.
XX
XX ABQ71696;
AC
XX
XX 28-AUG-2002 (first entry)
DT
XX
XX Zinc finger protein related oligonucleotide target SEQ ID NO:1688.
DE
XX Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.
KW
XX Homo sapiens.
XX OS Synthetic.
XX WO200242459-A2.
PN
XX 30-MAY-2002.
PD

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XX 20-NOV-2001; 2001WO-US043438.
PF
XX 20-NOV-2000; 2000US-00716637.
PR
XX
XX (SANG-) SANGAMO BIOSCIENCES INC.
PA
XX
XX Liu Q;
PI
XX WPI; 2002-500284/53.
DR
XX
XX New zinc finger protein that binds to target site, useful in studying
PT gene function and for human therapeutics and plant engineering, comprises
PT first, second and third zinc fingers, ordered from N- to C-terminus.
PT
XX
XX Example 1; Page 52; 8lpp; English.
PS
XX The present invention describes a zinc finger protein (I) that binds to a
CC target site, comprising a first (F1), a second (F2), and a third (F3)
CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the
CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),
CC and a third (S3) target subsite. Also described are: (1) a polypeptide
CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and
CC (3) designing (M) (I) involves selecting the F1 zinc finger such that it
CC binds to the S1 target subsite, selecting the F2 zinc finger such that it
CC binds to the S2 target subsite, and selecting the F3 zinc finger such
CC that it binds to the S3 target subsite, thus designing (I) that binds to
CC a target site. (I) is useful for recognition of triplet target subsites
CC having the nucleotide G in the 5'-most position of the subsite. (I) is
CC useful in studying gene function, and for human therapeutics and plant
CC engineering. (I), (II) or (III) is useful in therapeutic methods to
CC modulate the expression of a target region within a subject, in
CC diagnostic methods for sequence specific detection of target nucleic acid
CC in a sample, and in assays to determined the phenotype and function of
CC gene expression. (I) has improved affinity and specificity for their
CC target sequences, as well as enhanced biological activity. ABQ71213 to
CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc
CC finger peptides which are given in the exemplification of the present
CC invention
XX
XX Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
SQ
Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 GCGGGCGG 11
DB 1 GCGGGCGG 8

RESULT 371
ABQ71697
ID ABQ71697 standard; DNA; 10 BP.
XX
XX ABQ71697;
AC
XX
XX 28-AUG-2002 (first entry)
DT
XX
XX Zinc finger protein related oligonucleotide target SEQ ID NO:1689.
DE
XX Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.
KW
XX Homo sapiens.
XX OS Synthetic.
XX WO200242459-A2.
PN
XX 30-MAY-2002.
PD
XX 20-NOV-2001; 2001WO-US043438.
PF
XX 20-NOV-2000; 2000US-00716637.
PR

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XX PA (SANG-) SANGAMO BIOSCIENCES INC.
XX PI
XX PT Liu Q;
XX DR WPI; 2002-500284/53.
XX PS
XX PT New zinc finger protein that binds to target site, useful in studying
XX PT gene function and for human therapeutics and plant engineering, comprises
XX PS first, second and third zinc fingers, ordered from N- to C-terminus.
XX PS Example 1; Page 52; 81pp; English.
XX CC The present invention describes a zinc finger protein (I) that binds to a
XX CC target site, comprising a first (F1), a second (F2), and a third (F3)
XX CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the
XX CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),
XX CC and a third (S3) target sub-site. Also described are: (1) a polypeptide
XX CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and
XX CC (3) designing (M) (I) involves selecting the F1 zinc finger such that it
XX CC binds to the S1 target sub-site, selecting the F2 zinc finger such that it
XX CC binds to the S2 target sub-site, and selecting the F3 zinc finger such that
XX CC that it binds to the S3 target sub-site, thus designing (I) that binds to
XX CC a target site. (I) is useful for recognition of triplet target sub-sites
XX CC having the nucleotide G in the 5'-most position of the sub-sites. (I) is
XX CC useful in studying gene function, and for human therapeutics and plant
XX CC engineering. (I), (II) or (III) is useful in therapeutic methods to
XX CC modulate the expression of a target region within a subject, in
XX CC diagnostic methods for sequence specific detection of target nucleic acid
XX CC in a sample, and in assays to determine the phenotype and function of
XX CC gene expression. (I) has improved affinity and specificity for their
XX CC target sequences, as well as enhanced biological activity. ABQ71213 to
XX CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc
XX CC finger peptides which are given in the exemplification of the present
XX CC invention
XX SQ Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 CGGGCGGC 11
DB 1 CGGGCGGC 8

RESULT 372
ABQ71543
ID ABQ71543 standard; DNA; 10 BP.
XX AC ABQ71543;
XX DT 28-AUG-2002 (first entry)
XX DE
XX DE Zinc finger protein related oligonucleotide target SEQ ID NO:1277.
XX KW Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX OS
XX PN WO200242459-A2.
XX PN
XX PD 30-MAY-2002.
XX PD
XX PF 20-NOV-2001; 2001WO-US043438.
XX PF
XX PR 20-NOV-2000; 2000US-00716637.
XX PR
XX PA (SANG-) SANGAMO BIOSCIENCES INC.
XX PI Liu Q;

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XX DR WPI; 2002-500284/53.
XX PT
XX PT New zinc finger protein that binds to target site, useful in studying
XX PT gene function and for human therapeutics and plant engineering, comprises
XX PS first, second and third zinc fingers, ordered from N- to C-terminus.
XX PS Example 1; Page 47; 81pp; English.
XX CC The present invention describes a zinc finger protein (I) that binds to a
XX CC target site, comprising a first (F1), a second (F2), and a third (F3)
XX CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the
XX CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),
XX CC and a third (S3) target sub-site. Also described are: (1) a polypeptide
XX CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and
XX CC (3) designing (M) (I) involves selecting the F1 zinc finger such that it
XX CC binds to the S1 target sub-site, selecting the F2 zinc finger such that it
XX CC binds to the S2 target sub-site, and selecting the F3 zinc finger such that
XX CC that it binds to the S3 target sub-site, thus designing (I) that binds to
XX CC a target site. (I) is useful for recognition of triplet target sub-sites
XX CC having the nucleotide G in the 5'-most position of the sub-sites. (I) is
XX CC useful in studying gene function, and for human therapeutics and plant
XX CC engineering. (I), (II) or (III) is useful in therapeutic methods to
XX CC modulate the expression of a target region within a subject, in
XX CC diagnostic methods for sequence specific detection of target nucleic acid
XX CC in a sample, and in assays to determine the phenotype and function of
XX CC gene expression. (I) has improved affinity and specificity for their
XX CC target sequences, as well as enhanced biological activity. ABQ71213 to
XX CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc
XX CC finger peptides which are given in the exemplification of the present
XX CC invention
XX SQ Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGGCGG 10
DB 1 GCGGGCGG 8

RESULT 373
ABQ72322/c
ID ABQ72322 standard; DNA; 10 BP.
XX AC ABQ72322;
XX DT 02-SEP-2002 (first entry)
XX DE
XX DE Human CYP2D6 gene polymorphism detection primer, SEQ ID NO:109.
XX KW Human; cytochrome P450; subfamily IID polypeptide 6; CYP2D6; enzyme;
XX KW chromosome 22q13.1; drug metabolism; detoxification; mono-oxygenase;
XX KW antiarrhythmic; arrhythmia; adrenoceptor antagonist; hypertension;
XX KW tricyclic antidepressant; procainamide; drug induced lupus syndrome;
XX KW environmentally linked disease; Parkinson's disease; haplotyping;
XX KW genotyping; haplotype; genetic variant; single nucleotide polymorphism;
XX KW SNP; drug screening; drug discovery; primer extension; primer; ss.
XX OS Homo sapiens.
XX OS
XX PN WO200238589-A2.
XX PN
XX PD 16-MAY-2002.
XX PD
XX PF 09-NOV-2001; 2001WO-US047396.
XX PF
XX PR 09-NOV-2000; 2000US-0247943P.
XX PR
XX PA (GENA-) GENAISSANCE PHARM INC.
XX PI

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PI Anastasio AE, Chew A, Choi JY, Denton RR, Nandabalan K;
 PI Petersen N, Rounds E;
 XX WPI; 2002-519292/55.
 XX
 XX Novel genetic variants of Cytochrome P450, Subfamily IID, Polypeptide 6
 PT isogenes, useful for improving efficiency and reliability in drug
 PT development for treating hypertension, arrhythmias and Parkinson's
 PT disease.
 XX
 XX Claim 17; Page 19; 158pp; English.
 PS
 XX The invention relates to a method for haplotyping the cytochrome P450,
 CC subfamily IID, polypeptide 6 (CYP2D6) gene (ABQ72215, ABQ72364) of an
 CC individual, and also describes 29 novel polymorphic sites within the
 CC human CYP2D6 gene. The CYP2D6 gene is located on chromosome 22q13.1 and
 CC contains 9 exons which encode a 497 amino acid protein (ABB09563). CYP2D6
 CC is a mono-oxygenase involved in the detoxification of many drugs and
 CC environmental chemicals. It plays a role in the metabolism of drugs such
 CC as antiarrhythmics, adrenoceptor antagonists and tricyclic
 CC antidepressants, and is also involved in the formation of a metabolite
 CC linked to the drug-induced lupus syndrome observed with procainamide.
 CC Variations in CYP2D6 activity or expression may also influence an
 CC individual's susceptibility to environmentally-linked diseases, and it
 CC has been demonstrated that CYP2D6 activity may be involved in the
 CC pathogenesis of Parkinson's disease, with individuals with a less active
 CC form of the enzyme tending to have an earlier onset of this condition.
 CC CYP2D6 nucleic acid sequences are useful in studying the expression and
 CC function of CYP2D6, and in expressing CYP2D6 protein for the screening
 CC drugs for the treatment of CYP2D6-associated diseases (e.g.,
 CC hypertension, atrial and ventricular arrhythmias, Parkinson's disease,
 CC and drug-induced lupus syndrome) or which are metabolised by CYP2D6.
 CC CYP2D6 nucleic acids and proteins are also useful in studying the effect
 CC of polymorphisms on the biological activity of CYP2D6. Polymorphisms in
 CC the target region may be determined by the use of allele-specific
 CC oligonucleotides (ASOs; ABQ72217-ABQ72303) as probes and primers, and by
 CC primer extension using oligonucleotide primers comprising sequences
 CC ABQ72304-ABQ72361. The method of the invention is useful for haplotyping
 CC the CYP2D6 gene in populations and in individuals, enabling decisions to
 CC be made as to whether CYP2D6 is a likely therapeutic target for a disease
 CC of interest, and to control for genetically-based bias in the design of
 CC drugs that target or are metabolised by CYP2D6. In addition, transgenic
 CC animals comprising a human CYP2D6 gene are useful for studying the
 CC expression of CYP2D6 isogenes in vivo, for in vivo screening and testing
 CC of drugs targeted to or metabolised by CYP2D6, and for testing the
 CC efficacy of therapeutic agents and compounds for treating CYP2D6-
 CC associated conditions in a biological system. Sequences ABQ72304-
 CC ABQ72361 represent sequences that are specifically claimed as components
 CC of primers used to detect polymorphisms in the CYP2D6 gene by primer
 CC extension
 XX
 SQ Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGCGGCG 9
 Db 8 GCGCGGCG 1
 RESULT 374
 ABV78512/c
 ID ABV78512 standard; cDNA; 10 BP.
 XX
 XX ABV78512;
 XX
 XX 29-NOV-2002 (first entry)
 DT
 XX Human Th1 cell preferentially expressed EST SAGE tag, SEQ ID NO:223.
 DE
 XX SAGE tag; serial analysis of gene expression; human; Th1 cell;
 XX

KW activated T cell; T lymphocyte; immune response; expression pattern;
 KW preferential expression; immune disorder; EST; expressed sequence tag;
 XX ss.
 XX Homo sapiens.
 XX JP2002186482-A.
 PN
 XX 02-JUL-2002.
 PD
 XX 19-DEC-2000; 2000JP-00385816.
 PF
 XX 19-DEC-2000; 2000JP-00385816.
 PR
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 PA
 XX WPI; 2002-594261/64.
 DR
 XX Human activated Th1 and Th2 cell expression gene group, useful for the
 PT diagnosis and treatment of Th1 and Th2-related diseases.
 PT
 XX Claim 19; Page 12; 60pp; Japanese.
 PS
 CC The invention relates to SAGE (serial analysis of gene expression) tags
 CC representing groups of genes which are expressed in activated human Th1
 CC and/or Th2 cells. The SAGE tags of this invention consist of a sequence
 CC of 10 nucleotides located downstream of the 5'-CATG-3' sequence motif
 CC lying nearest to the polyA region of cDNAs derived from a variety of
 CC genes. These tags serve to uniquely identify each transcript and can thus
 CC be used to analyse the pattern of gene expression in particular cell
 CC types. The invention also relates to proteins encoded by the genes
 CC expressed in Th1 and/or Th2 cells, antibodies against these proteins, and
 CC inhibitors of the expression of groups of genes that are expressed in
 CC either or both the two cell types. Groups of genes expressed in Th1
 CC and/or Th2 cell types may be used for the diagnosis and treatment of Th1
 CC and Th2-related disorders. Sequences ABV78390-ABV78560 are SAGE tags
 CC representing 171 genes which are more highly expressed in Th1 cells
 CC compared with Th2 cells
 XX
 SQ Sequence 10 BP; 0 A; 5 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGCGGC 8
 Db 10 CGCGCGGC 3
 RESULT 375
 AAL39540
 ID AAL39540 standard; DNA; 10 BP.
 XX
 XX AAL39540;
 AC
 XX 05-SEP-2002 (first entry)
 DT
 XX CCBP2 detecting ASO primer SEQ ID No 67.
 XX
 XX Chemokine binding protein 2; CCBP2; CCBP2 protein isoform; gene therapy;
 KW polymorphic gene variant; single nucleotide polymorphism; human; primer;
 KW PCR; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO200232926-A2.
 PN
 XX 25-APR-2002.
 PD
 XX 12-OCT-2001; 2001WO-US042685.
 PF
 XX 12-OCT-2000; 2000US-0239638P.
 PR

XX PA (GENA-) GENAISSANCE PHARM INC.
 XX PI Armstrong B, Kazemi A, Koshy B;
 XX DR WPI; 2002-435524/46.
 XX PT New genetic variants having polymorphisms in the chemokine binding
 PT protein 2 (CCBP2) gene, useful for studying CCBP2 functions, and for
 PT treating disorders affected by expression or function of the CCBP2
 PT isogene.
 XX PS Claim 15; Page 14; 84pp; English.
 XX CC The invention relates to an isolated polynucleotide comprising genes and
 CC haplotypes of the chemokine binding protein 2 (CCBP2) gene. Polymorphic
 CC variants of the CCBP2 gene are useful in studying the expression and
 CC function of CCBP2, and in expressing CCBP2 proteins for use in screening
 CC candidate drugs for treating diseases associated with CCBP2 activity.
 CC Polynucleotides comprising a polymorphic gene variant or fragment may be
 CC used for therapeutic purposes, where a patient could benefit from
 CC expression or increased expression of a particular CCBP2 protein isoform,
 CC or an expression vector encoding the isoform may be administered to the
 CC patient. Haplotype information is useful in improving the efficiency and
 CC output of several steps in drug discovery and development process,
 CC including target validation, identifying lead compounds, and early phase
 CC clinical trials. The polynucleotides of the invention can be used to
 CC treat disorders related to the CCBP2 gene by gene therapy. This
 CC polynucleotide sequence represents a preferred ASO primer for detecting
 CC CCBP2 gene polymorphisms relating to the invention
 XX SQ Sequence 10 BP; 1 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGGGGC 8
 Db 2 CGCGGGGC 9
 RESULT 376
 ABT14383/c
 ID ABT14383 standard; DNA; 10 BP.
 XX AC ABT14383;
 XX DT 20-FEB-2003 (first entry)
 XX DE Nucleic acid PCR amplification method-related RAPD PCR primer #153.
 XX KW Nucleic acid amplification; nucleic acid analysis; DNA analysis; ss;
 KW RNA analysis; RAPD; PCR; primer; random amplified polymorphic DNA.
 XX OS Unidentified.
 XX PN WO200281743-A2.
 XX PD 17-OCT-2002.
 XX PF 28-MAR-2002; 2002WO-GB001489.
 XX PR 02-APR-2001; 2001GB-00008182.
 XX PA (HAMI/) HAMILL B.
 XX PI Hamill B;
 XX DR WPI; 2003-075484/07.
 XX PT Amplification of nucleotide sequences from polynucleotides by chain
 extension of oligonucleotide primers, comprises 2 oligonucleotides in

PT solution, 2 attached to supports and both share complementary sequences.
 XX Disclosure; Fig 17; 60pp; English.
 XX CC The invention comprises a method for the PCR amplification of nucleic
 CC acids. The method involves a set of primers, where two of the primers are
 CC in solution and at least two other primers are attached to a solid
 CC support. The method of the invention can be used for the analysis of a
 CC nucleic acid or a mixture of nucleic acids, including: single-stranded
 CC DNA molecules, double-stranded DNA molecules and mRNA molecules. The
 CC present DNA sequence represents a random amplified polymorphic DNA (RAPD)
 CC PCR primer of the invention
 XX SQ Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 7 GCGGCATC 14
 Db 9 GCGGCATC 2
 RESULT 377
 ADA63306
 ID ADA63306 standard; DNA; 10 BP.
 XX AC ADA63306;
 XX DT 20-NOV-2003 (first entry)
 XX DE Zinc finger target sequence DNA #328.
 XX KW ds; target sequence; zinc finger protein;
 KW multi-finger zinc finger protein; improved affinity;
 XX OS Improved specificity; enhanced biological activity.
 XX OS Synthetic.
 XX PN US2003068675-A1.
 XX PD 10-APR-2003.
 XX PF 20-NOV-2001; 2001US-00990186.
 XX PR 24-MAR-1999; 99US-0126238P.
 XX PR 24-MAR-1999; 99US-0126239P.
 XX PR 30-JUL-1999; 99US-0146595P.
 XX PR 30-JUL-1999; 99US-0146615P.
 XX PR 23-MAR-2000; 2000US-00535008.
 XX PR 20-NOV-2000; 2000US-00716637.
 XX PA (LIU/) LIU Q.
 XX PI Liu Q;
 XX DR WPI; 2003-567233/53.
 XX PT Designing zinc finger protein that has three zinc fingers from N-terminus
 PT and C-terminus that bind to subsites in 3' to 5' direction, in a target
 XX site, by selecting zinc fingers that bind their respective subsites.
 XX PS Disclosure; Page 18; 34pp; English.
 XX CC The invention relates to a method of designing a zinc finger protein. The
 CC method is useful for designing a zinc finger protein. The method provides
 CC multi-finger zinc finger proteins with improved affinity and specificity
 CC for their target sequences, as well as enhanced biological activity. The
 CC present sequence represents a zinc finger protein DNA target sequence.
 XX SQ Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;

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Query Match          50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCGCG 10
DB 1 GCGGCGCG 8

RESULT 378
ADA63717
ID ADA63717 standard; DNA; 10 BP.
XX
AC ADA63717;
XX
DT 20-NOV-2003 (first entry)
XX
DE Zinc finger target sequence DNA #481.
XX
ds; target sequence; zinc finger protein;
KW multi-finger zinc finger protein; improved affinity;
KW improved specificity; enhanced biological activity.
XX
OS Synthetic.
XX
PN US2003068675-A1.
XX
PD 10-APR-2003.
XX
PF 20-NOV-2001; 2001US-00990186.
XX
PR 24-MAR-1999; 99US-0126238P.
PR 24-MAR-1999; 99US-0126239P.
PR 30-JUL-1999; 99US-0146595P.
PR 30-JUL-1999; 99US-0146615P.
PR 23-MAR-2000; 2000US-00535008.
PR 20-NOV-2000; 2000US-00716637.
XX
PA (LIUQ/) LIU Q.
XX
PI Liu Q;
XX
DR WPI; 2003-567233/53.
XX
PT Designing zinc finger protein that has three zinc fingers from N-terminus
PT and C-terminus that bind to subsites in 3' to 5' direction, in a target
PT site, by selecting zinc fingers that bind their respective subsites.
XX
PS Disclosure; Page 20; 34pp; English.
XX
CC The invention relates to a method of designing a zinc finger protein. The
CC method is useful for designing a zinc finger protein. The method provides
CC multi-finger zinc finger proteins with improved affinity and specificity
CC for their target sequences, as well as enhanced biological activity. The
CC present sequence represents a zinc finger protein DNA target sequence.
XX
SQ Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match          50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 CCGGCGCG 11
DB 1 CCGGCGCG 8

RESULT 379
ADA62130
ID ADA62130 standard; DNA; 10 BP.
XX
AC ADA62130;
XX

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DT 20-NOV-2003 (first entry)
XX
DE Zinc finger target sequence DNA #85.
XX
KW ds; target sequence; zinc finger protein;
KW multi-finger zinc finger protein; improved affinity;
KW improved specificity; enhanced biological activity.
XX
OS Synthetic.
XX
PN US2003068675-A1.
XX
PD 10-APR-2003.
XX
PF 20-NOV-2001; 2001US-00990186.
XX
PR 24-MAR-1999; 99US-0126238P.
PR 24-MAR-1999; 99US-0126239P.
PR 30-JUL-1999; 99US-0146595P.
PR 30-JUL-1999; 99US-0146615P.
PR 23-MAR-2000; 2000US-00535008.
PR 20-NOV-2000; 2000US-00716637.
XX
PA (LIUQ/) LIU Q.
XX
PI Liu Q;
XX
DR WPI; 2003-567233/53.
XX
PT Designing zinc finger protein that has three zinc fingers from N-terminus
PT and C-terminus that bind to subsites in 3' to 5' direction, in a target
PT site, by selecting zinc fingers that bind their respective subsites.
XX
PS Disclosure; Page 14; 34pp; English.
XX
CC The invention relates to a method of designing a zinc finger protein. The
CC method is useful for designing a zinc finger protein. The method provides
CC multi-finger zinc finger proteins with improved affinity and specificity
CC for their target sequences, as well as enhanced biological activity. The
CC present sequence represents a zinc finger protein DNA target sequence.
XX
SQ Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;

Query Match          50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGCGCG 10
DB 1 GCGGCGCG 8

RESULT 380
ADA63718
ID ADA63718 standard; DNA; 10 BP.
XX
AC ADA63718;
XX
DT 20-NOV-2003 (first entry)
XX
DE Zinc finger target sequence DNA #482.
XX
ds; target sequence; zinc finger protein;
KW multi-finger zinc finger protein; improved affinity;
KW improved specificity; enhanced biological activity.
XX
OS Synthetic.
XX
PN US2003068675-A1.
XX
PD 10-APR-2003.
XX
PF 20-NOV-2001; 2001US-00990186.

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XX PR 24-MAR-1999; 99US-0126238P.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 30-JUL-1999; 99US-0146595P.
XX PR 30-JUL-1999; 99US-0146615P.
XX PR 23-MAR-2000; 2000US-00535008.
XX PR 20-NOV-2000; 2000US-00716637.
XX PA (LIUQ/) LIU Q.
XX XX
XX PI Liu Q;
XX XX
XX DR WPI; 2003-567233/53.
XX XX
XX PT Designing zinc finger protein that has three zinc fingers from N-terminus
XX PT and C-terminus that bind to subsites in 3' to 5' direction, in a target
XX PT site, by selecting zinc fingers that bind their respective subsites.
XX XX
XX PS Disclosure; Page 20; 34pp; English.
XX XX
XX CC The invention relates to a method of designing a zinc finger protein. The
XX CC method is useful for designing a zinc finger protein. The method provides
XX CC multi-finger zinc finger proteins with improved affinity and specificity
XX CC for their target sequences, as well as enhanced biological activity. The
XX CC present sequence represents a zinc finger protein DNA target sequence.
XX XX
XX SQ Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
XX
Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4 CGGGCGGC 11
Db |||||
1 CGGGCGGC 8
RESULT 381
ADM22215
ID ADM22215 standard; DNA; 10 BP.
XX
XX AC ADM22215;
XX XX
XX DT 20-MAY-2004 (first entry)
XX XX
XX DE Synthetic zinc finger protein target DNA #481.
XX KW zinc finger protein; triplet target subsite; zinc finger motif; sp-1; ds.
XX OS Unidentified.
XX PN US2003104526-A1.
XX PD 05-JUN-2003.
XX PF 20-NOV-2001; 2001US-00989994.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 30-JUL-1999; 99US-0146595P.
XX PR 30-JUL-1999; 99US-0146615P.
XX PR 23-MAR-2000; 2000US-00535008.
XX PR 20-NOV-2000; 2000US-00716637.
XX XX
XX PA (LIUQ/) LIU Q.
XX XX
XX PI Liu Q;
XX XX
XX DR WPI; 2003-843091/78.
XX XX
XX PT New zinc finger protein used for recognizing triplet target subsites
XX PT having nucleotide G in 5'-most position of subsite, that has been
XX PT optimized with respect to location of subsite within target site.
XX XX
XX PS Example 6; SEQ ID NO 1277; 48pp; English.
XX XX
XX CC The invention describes a new zinc finger protein that binds to a target
XX CC site comprising a first (F1), a second (F2) or a third (F3) zinc finger,
XX CC ordered F1, F2 and F3 from N-terminus to C-terminus. The target site
XX CC comprises, in the 3' to 5' direction, first (S1), second (S2) and third
XX CC (S3) target subsites. The zinc finger proteins can be used for
XX CC recognising triplet target subsites having the nucleotide G in the 5'-
XX CC most position of the subsite, that has been optimised with respect to the
XX CC location of the subsite within the target site. This sequence represents
XX CC the target polynucleotide of a synthetic zinc finger protein of the

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XX PS Example 6; SEQ ID NO 1688; 48pp; English.
XX XX
XX CC The invention describes a new zinc finger protein that binds to a target
XX CC site comprising a first (F1), a second (F2) or a third (F3) zinc finger,
XX CC ordered F1, F2 and F3 from N-terminus to C-terminus. The target site
XX CC comprises, in the 3' to 5' direction, first (S1), second (S2) and third
XX CC (S3) target subsites. The zinc finger proteins can be used for
XX CC recognising triplet target subsites having the nucleotide G in the 5'-
XX CC most position of the subsite, that has been optimised with respect to the
XX CC location of the subsite within the target site. This sequence represents
XX CC the target polynucleotide of a synthetic zinc finger protein of the
XX XX
XX SQ Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
XX
Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4 CGGGCGGC 11
Db |||||
1 CGGGCGGC 8
RESULT 382
ADM21510
ID ADM21510 standard; DNA; 10 BP.
XX
XX AC ADM21510;
XX XX
XX DT 20-MAY-2004 (first entry)
XX XX
XX DE Synthetic zinc finger protein target DNA #328.
XX KW zinc finger protein; triplet target subsite; zinc finger motif; sp-1; ds.
XX OS Unidentified.
XX PN US2003104526-A1.
XX PD 05-JUN-2003.
XX PF 20-NOV-2001; 2001US-00989994.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 30-JUL-1999; 99US-0146595P.
XX PR 30-JUL-1999; 99US-0146615P.
XX PR 23-MAR-2000; 2000US-00535008.
XX PR 20-NOV-2000; 2000US-00716637.
XX XX
XX PA (LIUQ/) LIU Q.
XX XX
XX PI Liu Q;
XX XX
XX DR WPI; 2003-843091/78.
XX XX
XX PT New zinc finger protein used for recognizing triplet target subsites
XX PT having nucleotide G in 5'-most position of subsite, that has been
XX PT optimized with respect to location of subsite within target site.
XX XX
XX PS Example 6; SEQ ID NO 1277; 48pp; English.
XX XX
XX CC The invention describes a new zinc finger protein that binds to a target
XX CC site comprising a first (F1), a second (F2) or a third (F3) zinc finger,
XX CC ordered F1, F2 and F3 from N-terminus to C-terminus. The target site
XX CC comprises, in the 3' to 5' direction, first (S1), second (S2) and third
XX CC (S3) target subsites. The zinc finger proteins can be used for
XX CC recognising triplet target subsites having the nucleotide G in the 5'-
XX CC most position of the subsite, that has been optimised with respect to the
XX CC location of the subsite within the target site. This sequence represents
XX CC the target polynucleotide of a synthetic zinc finger protein of the

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CC invention.
XX
SQ Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;

Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3 GCGGGCGG 10
Db      1 GCGGGCGG 8

RESULT 383
ADM22216
ID ADM22216 standard; DNA; 10 BP.
XX
AC ADM22216;
XX
DT 20-MAY-2004 (first entry)
XX
DE Synthetic zinc finger protein target DNA #482.
XX
KW zinc finger protein; triplet target subsite; zinc finger motif; sp-1; ds.
XX
OS Unidentified.
XX
PN US2003104526-A1.
XX
PD 05-JUN-2003.
XX
PF 20-NOV-2001; 2001US-00989994.
XX
PR 24-MAR-1999; 99US-0126238P.
XX
PR 24-MAR-1999; 99US-0126238P.
XX
PR 30-JUL-1999; 99US-0146595P.
XX
PR 30-JUL-1999; 99US-0146615P.
XX
PR 23-MAR-2000; 2000US-00535008.
XX
PR 20-NOV-2000; 2000US-00716637.
XX
PA (LIUQ/) LIU Q.
XX
PI Liu Q;
XX
WPI; 2003-843091/78.
XX
New zinc finger protein used for recognizing triplet target subsites
having nucleotide G in 5'-most position of subsite, that has been
optimized with respect to location of subsite within target site.
XX
Example 6; SEQ ID NO 1689; 48pp; English.
XX
The invention describes a new zinc finger protein that binds to a target
site comprising a first (F1), a second (F2) or a third (F3) zinc finger,
ordered F1, F2 and F3 from N-terminus to C-terminus. The target site
comprises, in the 3' to 5' direction, first (S1), second (S2) and third
(S3) target subsites. The zinc finger proteins can be used for
recognising triplet target subsites having the nucleotide G in the 5'-
most position of the subsite, that has been optimised with respect to the
location of the subsite within the target site. This sequence represents
the target polynucleotide of a synthetic zinc finger protein of the
invention.
XX
SQ Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4 CGGGCGGC 11
Db      1 CGGGCGGC 8

RESULT 384
ADM20334
ID ADM20334 standard; DNA; 10 BP.
XX
AC ADM20334;
XX
DT 20-MAY-2004 (first entry)
XX
DE Synthetic zinc finger protein target DNA #85.
XX
KW zinc finger protein; triplet target subsite; zinc finger motif; sp-1; ds.
XX
OS Unidentified.
XX
PN US2003104526-A1.
XX
PD 05-JUN-2003.
XX
PF 20-NOV-2001; 2001US-00989994.
XX
PR 24-MAR-1999; 99US-0126238P.
XX
PR 24-MAR-1999; 99US-0126238P.
XX
PR 30-JUL-1999; 99US-0146595P.
XX
PR 30-JUL-1999; 99US-0146615P.
XX
PR 23-MAR-2000; 2000US-00535008.
XX
PR 20-NOV-2000; 2000US-00716637.
XX
PA (LIUQ/) LIU Q.
XX
PI Liu Q;
XX
WPI; 2003-843091/78.
XX
New zinc finger protein used for recognizing triplet target subsites
having nucleotide G in 5'-most position of subsite, that has been
optimized with respect to location of subsite within target site.
XX
Example 6; SEQ ID NO 101; 48pp; English.
XX
The invention describes a new zinc finger protein that binds to a target
site comprising a first (F1), a second (F2) or a third (F3) zinc finger,
ordered F1, F2 and F3 from N-terminus to C-terminus. The target site
comprises, in the 3' to 5' direction, first (S1), second (S2) and third
(S3) target subsites. The zinc finger proteins can be used for
recognising triplet target subsites having the nucleotide G in the 5'-
most position of the subsite, that has been optimised with respect to the
location of the subsite within the target site. This sequence represents
the target polynucleotide of a synthetic zinc finger protein of the
invention.
XX
SQ Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;

Query Match      50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3 GCGGGCGG 10
Db      1 GCGGGCGG 8

RESULT 385
ADJ65133/C
ID ADJ65133 standard; DNA; 10 BP.
XX
AC ADJ65133;
XX
DT 20-MAY-2004 (first entry)
XX
DE N. crassa frq gene proximal LRE imperfect repeat #1.
XX
KW Light responsive element; frq gene; LRE; imperfect repeat; ds; WC-1;
```


KW WC-2; white collar complex; flavin adenine dinucleotide; FAD;
 KW Transactivator.
 XX
 OS Neurospora crassa.
 XX US2004038400-A1.
 PN Judd CR, Rounds EW, Russo DP, Windemuth AK;
 XX WPI; 2004-FEB-2004.
 PD
 XX 26-AUG-2002; 2002US-00228876.
 PF 26-AUG-2002; 2002US-00228876.
 XX
 PR
 XX (FROE/) FROEHLICH A C.
 PA (LORO/) LOROS J.
 PA (DUNL/) DUNLAP J C.
 XX
 XX Froehlich AC, Loros J, Dunlap JC;
 XX
 DR WPI; 2004-202233/19.
 XX
 XX Regulating expression of a gene in a cell comprises contacting a cell
 PT containing FAD and a gene operatively linked to a light-responsive
 PT regulatory sequence with a WC-1/WC-2 transactivator.
 XX
 XX Claim 3; SEQ ID NO 1; 2lpp; English.
 XX
 XX The invention relates to regulating expression of a gene in a cell
 CC comprising contacting a cell containing flavin adenine dinucleotide (FAD)
 CC and a gene operatively-linked to a light-responsive regulatory sequence
 CC with a white collar (WC)-1/WC-2 transactivator that binds FAD and the
 CC light-responsive regulatory sequence. Also included are a light-
 CC responsive regulatory sequence (or light responsive element, LRE)
 CC appearing as ADJ65133, ADJ65134, ADJ65135, and ADJ65136(LRes from the N
 CC crassa frq gene promoter) and a kit comprising a WC-1/WC-2 transactivator
 CC and a light-responsive regulatory sequence. The method and kit are useful
 CC for regulating gene expression using light. The present sequence is an
 CC LRE (comprising an imperfect repeat) from the Neurospora crassa frq gene
 CC promoter which binds the WC-1/WC-2 transactivators.
 XX
 SQ Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 7 GCGGCATC 14
 DB 9 GCGGCATC 2
 RESULT 386
 ADN89074
 ID ADN89074 standard; DNA; 10 BP.
 XX
 AC ADN89074;
 XX
 XX 15-JUL-2004 (first entry)
 XX
 DE Hyperlipidemia treatment associated human ITGB3 haplotype probe #139.
 XX
 XX ss; probe; antilipemic; gene therapy; allele; polymorphic site;
 KW integrin beta 3; ITGB3; statin response marker; hyperlipidemia.
 KW
 XX Homo sapiens.
 OS
 XX WO2004033710-A2.
 PN
 XX 22-APR-2004.
 PD
 XX
 XX 09-OCT-2003; 2003WO-US032361.
 PF
 XX 09-OCT-2002; 2002US-0417743P.
 PR

(GENA-) GENAISSANCE PHARM INC.
 Bentiwegna SC, Bieglecki KM, Brain CD, Dain BJ, Cappola G;
 Judson RS, Lachowicz M, Lee HH, Litvyn L, Messer C, Petersen N;
 Reed CR, Rounds EW, Russo DP, Windemuth AK;
 WPI; 2004-340942/31.
 XX
 XX New kit comprising a set of oligonucleotides, useful for determining
 PT whether an individual has a statin response marker I or II for preparing
 PT a composition for treating hyperlipidemia.
 XX
 XX Claim 13; SEQ ID NO 142; 202pp; English.
 XX
 XX A kit comprising a set of oligonucleotides designed for identifying at
 CC least one of the alleles at each polymorphic site (PS) in a set of 129
 CC polymorphic sites (PSs) given in the specification, is new. The kit
 CC identifies at least one of the alleles at each polymorphic site (PS) in a
 CC set of 129 polymorphic sites (PSs) given in the specification, for
 CC example: PSI and PS42; PS19 and PS42; PS3, PS12, and PS42; a set of
 CC polymorphic sites comprising a linked haplotype to any one of haplotypes
 CC 101-194, 201-463 or 501-515 given in the specification; or a set of
 CC polymorphic sites comprising a substitute haplotype for any one of
 CC haplotypes 101-194, 201-463 or haplotypes 501-515 given in the
 CC specification; where the nucleotide position of each polymorphic site
 CC corresponds to the following nucleotide position in the 32577-bp
 CC sequence: 1118 (PS1), 1773 (PS3), 1875 (PS4), 1911 (PS5), 1957 (PS6),
 CC 2087 (PS10), 2157 (PS12), 13384 (PS15), 13405 (PS16), 16200 (PS19), 17194
 CC (PS20), 17273 (PS21), 20035 (PS26), 20047 (PS28), 20615 (PS30), 21944
 CC (PS33), 22155 (PS35), 25705 (PS37), 25921 (PS38), 27882 (PS39), and 30618
 CC (PS42). INDEPENDENT CLAIMS are also included for: determining whether an
 CC individual has a statin response marker I or a statin response marker II;
 CC selecting a statin therapy to provide an optimal High Density Lipoprotein
 CC Cholesterol (HDL) response in an individual; predicting an individual's
 CC High Density Lipoprotein Cholesterol (HDL) response to treatment with a
 CC statin; predicting an individual's High Density Lipoprotein Cholesterol
 CC (HDL) response to treatment with a statin; manufacturing a drug product;
 CC seeking regulatory approval for marketing a pharmaceutical formulation
 CC for treating a disease or condition in a population partially or wholly
 CC defined by having a statin response marker I; marketing a drug product
 CC comprising a statin as at least one active ingredient for treating a
 CC disease or condition in a population partially or wholly defined by
 CC having a statin response marker I; an isolated polynucleotide comprising
 CC a first nucleotide sequence which comprises an integrin, beta 3(ITGB3)
 CC isogene encoding a ITGB3 polypeptide, where the ITGB3 isogene consisting
 CC of isogenes 1-38 and 40-98 defined by a correspondingly numbered
 CC haplotype, where each of the isogenes comprises nucleotides 1000-2235,
 CC 4256-4716, 1317913723, 14235-14858, 16126-16619, 16930-17414, 19241-
 CC 19644, 19748-20177, 2053721009, 21731-22412, 24385-24930, 25559-26029,
 CC 27822-28255, 30265-30754, and 31300-31718 of the 32577-bp sequence,
 CC except where substituted by the sequence of alleles for the
 CC correspondingly numbered haplotype at the polymorphic sites whose
 CC nucleotide positions in the 32577-bp sequence and a second nucleotide
 CC sequence which is complementary to the first nucleotide sequence; a
 CC recombinant nonhuman organism transformed or transfected with the
 CC isolated polynucleotide, where the organism expresses an ITGB3
 CC polypeptide encoded by the selected ITGB3 isogene; an isolated fragment
 CC of an integrin, beta 3(ITGB3) isogene, where the fragment comprises one
 CC or more polymorphisms consisting of thymine at PS 1, guanine at PS2,
 CC cytosine at PS3, thymine at PS4, cytosine at PS5, adenine at PS6, thymine
 CC at PS7, thymine at PS8, guanine at PS9, adenine at PS10, adenine at PS11,
 CC thymine at PS12, adenine at PS13, guanine at PS16, adenine at PS18,
 CC thymine at PS19, guanine at PS21, guanine at PS22, cytosine at PS23,
 CC cytosine at PS24, thymine at PS25: adenine at PS26, adenine at PS27,
 CC thymine at PS29, adenine at PS30, cytosine at PS31, guanine at PS32,
 CC adenine at PS33, adenine at PS35, cytosine at PS37, thymine at PS38,
 CC cytosine at PS39, adenine at PS40, thymine at PS41, thymine at PS42,
 CC guanine at PS43 and guanine at PS44; a genome anthology for the integrin,
 CC beta 3(ITGB3) gene which comprises two or more ITGB3 isogenes consisting
 CC of isogenes 1-98, where each of the selected isogenes is defined by a
 CC correspondingly numbered haplotype given in the specification, and where
 CC each of the isogenes comprises nucleotides 1000-2235, 4256-4716, 13179-

CC 13723, 14235-14859, 16126-16619, 16930-17414, 19241-19644, 19748-20177,
 CC 2053*21009, 21731-22412, 24385-24930, 25559*6029, 27822-28255, 30265-
 CC 30754, and 31300-31718 of the 32577-bp sequence except where substituted
 CC by the sequence of alleles for the correspondingly numbered haplotype at
 CC each of file polymorphic sites; haplotyping the integrin, beta 3 (ITGB3)
 CC gene of an individual; assigning a haplotype pair for the integrin, beta
 CC 3 (ITGB3) gene to an individual; reducing the potential for bias in a
 CC clinical trial of a candidate drug for treating a disease or condition
 CC predicted to be associated with ITGB3 activity; an isolated polypeptide
 CC comprising a ITGB3 protein variant consisting of protein variants A, B,
 CC C, D, E, F and G and comprising 788-amino acid sequence, except where
 CC substituted by the corresponding sequence of amino acids whose positions
 CC and alleles are given in the specification; an isolated monoclonal
 CC antibody specific for and immunoreactive with the selected ITGB3 protein
 CC variant comprising the isolated polypeptide; screening for drugs
 CC targeting the selected ITGB3 protein variant comprising the isolated
 CC polypeptide; an isolated fragment of an ITGB3 protein variant, where the
 CC fragment is at least 6 amino acids in length and comprises one or more
 CC variant amino acids consisting of methionine at a position corresponding
 CC to amino acid position 14, arginine at a position corresponding to amino
 CC acid position 66, methionine at a position corresponding to amino acid
 CC position 445, and glutamine at a position corresponding to amino acid
 CC position 515 the 788-amino acid sequence; screening for drugs targeting
 CC the selected ITGB3 protein variant comprising the isolated polypeptide;
 CC screening for compounds targeting the ITGB3 protein to treat a condition
 CC or disease predicted to be associated with ITGB3 activity; validating the
 CC ITGB3 protein as a candidate target for treating a medical condition
 CC predicted to be associated with ITGB3 activity; and an isolated
 CC oligonucleotide designed for detecting a polymorphism in the integrin,
 CC beta 3 (ITGB3) gene at a polymorphic site (PS) consisting of PS1-PS44,
 CC where the oligonucleotide contains or is located one to several
 CC nucleotides downstream of the selected PS, where the oligonucleotide has
 CC a length of about 15 to about 100 nucleotides. Preferred Kit: The kit
 CC further comprises a manual with instructions for performing one or more
 CC reactions on a human nucleic acid sample to identify the allele(s)
 CC present in the individual at each polymorphic site in the set of
 CC polymorphic sites and determining if the individual has a statin response
 CC marker I or a statin response marker II based on the identified
 CC allele(s). The set of oligonucleotides is designated for identifying both
 CC alleles at each polymorphic site of the selected set of polymorphic
 CC sites. The set of PSs comprises PS3, PS12 and PS42; PS 1, PS12 and PS42;
 CC PS3 and PS42; PS1 and PS42; PS1, PS3, PS12 and PS42; or PS39. The set of
 CC PS is PS3, PS12 or PS42. The individual is Caucasian. The linkage
 CC disequilibrium between the linked haplotype and any one of haplotypes 101
 CC -194, 201-463 or 501-515 has ΔG_{r2} consisting of at least 0.75, at least
 CC 0.80, at least 0.85, at least 0.90, at least 0.95 or 1.0. At least one of
 CC the oligonucleotides in the set of oligonucleotides is an allele-specific
 CC oligonucleotide comprising a nucleotide sequence consisting of 10-15 bp.
 CC The set of polymorphic sites is PS3, PS12, and PS42 and the set of
 CC oligonucleotides comprises first, second and third allele-specific
 CC oligonucleotide (ASO) probes, where the first ASO probe comprises 15-bp
 CC sequence, or its complement, and S in the 15-bp sequence is guanine; the
 CC second ASO probe comprises 15-bp sequence, or its complement, and Y in
 CC the 15-bp sequence is cytosine, and the third ASO probe comprises 15 bp,
 CC or its complement, and Y in the 15-bp sequence is cytosine. Preferred
 CC Article: The article of manufacture comprises a pharmaceutical
 CC formulation and at least one indicium identifying a population for whom
 CC the pharmaceutical formulation is indicated, where the pharmaceutical
 CC formulation comprises a statin as at least one active ingredient and the
 CC identified population is partially or wholly defined by having a statin
 CC response marker I, where a trial population having the statin response
 CC marker I exhibits a better HDLC response to the pharmaceutical
 CC formulation than to treatment with atorvastatin or salt of atorvastatin
 CC acid. It also comprises packaging material and a pharmaceutical
 CC formulation contained within the packaging material, where the
 CC pharmaceutical formulation comprises a statin as at least one separate
 CC active ingredient, and the packaging material comprises an approved label
 CC which states that the pharmaceutical formulation is indicated for a
 CC population partly or wholly defined by having a statin response marker I,
 CC where a trial population having the statin response marker exhibits a
 CC better HDLC response to the pharmaceutical formulation than to treatment
 CC with atorvastatin or a salt of atorvastatin acid. Preferred
 CC Oligonucleotide: The isolated oligonucleotide is an allele-specific

CC oligonucleotide that specifically hybridizes to an allele of the ITGB3
 CC gene at a region containing the polymorphic site. The isolated
 CC oligonucleotide is a primer-extension oligonucleotide. The kit is for
 CC haplotyping the integrin, beta 3 (ITGB3) gene of all individual,
 CC comprises a set of oligonucleotides designed for identifying at least one
 CC of the alleles at each polymorphic site (PS) in a set of two or more
 CC polymorphic sites. Preferred Method: Determining whether an individual
 CC has a statin response marker I or a statin response marker II comprises
 CC determining the copy number in the individual of the haplotype, where if
 CC the selected haplotype is one of haplotypes given in the specification,
 CC then the individual has a statin response marker I if the individual has
 CC at least one copy of the selected haplotype and a statin response marker
 CC II if the individual has zero copy of the selected haplotype; and the
 CC individual has a statin response marker I if the individual has zero or
 CC one copy of the selected haplotype and a statin response marker II if the
 CC individual has two copies of the selected haplotype. The individual is a
 CC candidate for treatment with a statin. The determining step comprises
 CC genotyping each polymorphic site in a set of polymorphic sites comprising
 CC the selected haplotype and using the results of the genotyping step to
 CC identify, for the set of polymorphic sites the haplotype pair present in
 CC the individual. The determining step comprises consulting a data
 CC repository, that provides information on the copy number present in the
 CC individual for the selected haplotype. The data repository is the
 CC individual's medical records or a medical data card. Assigning an
 CC individual to a first or second statin response marker group comprises
 CC determining the copy number in the individual or a haplotype and
 CC assigning the individual to the first statin response marker group if the
 CC individual has at least one copy of the selected haplotype and to the
 CC second statin response marker group if the individual has zero copy of
 CC the selected haplotype; and assigning the individual to the first statin
 CC response marker group if the individual has zero or one copy of the
 CC selected haplotype and to the second statin response marker group if the
 CC individual has two copies of the selected haplotype. The determining step
 CC comprises genotyping each polymorphic site in a set of polymorphic sites

Query Match 50.0%; Score 8; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 2.1e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 8; Conservative 0;

QY 4 CGGGCGGC 11

Db 1 CGGGCGGC 8

RESULT 387

ID ADN89081/c

XX ADN89081 standard; DNA; 10 BP.

XX AC ADN89081;

XX DT 15-JUL-2004 (first entry)

XX DE Hyperlipidemia treatment associated human ITGB3 haplotype probe #146.

XX KW ss: probe; antilipemic; gene therapy; allele; polymorphic site;

XX OS integrin beta 3; ITGB3; statin response marker; hyperlipidemia.

XX PN Homo sapiens.

XX WO2004033710-A2.

XX PD 22-APR-2004.

XX PF 09-OCT-2003; 2003WO-US023261.

XX PR 09-OCT-2002; 2002US-0417743P.

XX PA (GENA-) GENAISANCE PHARM INC.

XX XX Bentivegna SC, Bieglecki KM, Brain CD, Dain BJ, Cappola G;

PI Judson RS, Lachowicz M, Lee HH, Litvyn L, Messer C, Petersen N;

PI Reed CR, Rounds EM, Russo DP, Windemuth AK;

XX

DR WPI; 2004-340942/31.

XX New kit comprising a set of oligonucleotides, useful for determining

PT whether an individual has a statin response marker I or II for preparing

PT a composition for treating hyperlipidemia.

PS Disclosure; SEQ ID NO 149; 202pp; English.

XX A kit comprising a set of oligonucleotides designed for identifying at

CC least one of the alleles at each polymorphic site (PS) in a set of 129

CC polymorphic sites (PSs) given in the specification, is new. The kit

CC identifies at least one of the alleles at each polymorphic site (PS) in a

CC set of 129 polymorphic sites (PSs) given in the specification, for

CC example: PS1 and PS42; PS19 and PS42; PS3, PS12, and PS42; a set of

CC polymorphic sites comprising a linked haplotype to any one of haplotypes

CC 101-194, 201-463 or 501-515 given in the specification; or a set of

CC polymorphic sites comprising a substitute haplotype for any one of

CC haplotypes 101-194, 201-463 or haplotypes 501-515 given in the

CC specification; where the nucleotide position of each polymorphic site

CC corresponds to the following nucleotide position in the 32577-bp

CC sequence: 1118 (PS1), 1773 (PS3), 1875 (PS4), 1911 (PS5), 1957 (PS6),

CC 2087 (PS10), 2157 (PS12), 13384 (PS15), 13405 (PS16), 16200 (PS19), 17194

CC (PS20), 17273 (PS21), 20035 (PS26), 20047 (PS28), 20615 (PS30), 21944

CC (PS33), 22155 (PS35), 25705 (PS37), 25921 (PS38), 27882 (PS39), and 30618

CC (PS42). INDEPENDENT CLAIMS are also included for: determining whether an

CC individual has a statin response marker I or a statin response marker II;

CC selecting a statin therapy to provide an optimal High Density Lipoprotein

CC Cholesterol (HDL) response in an individual; predicting an individual's

CC High Density Lipoprotein Cholesterol (HDL) response to treatment with a

CC statin; predicting an individual's High Density Lipoprotein Cholesterol

CC (HDL) response to treatment with a statin; manufacturing a drug product;

CC seeking regulatory approval for marketing a pharmaceutical formulation

CC for treating a disease or condition in a population partially or wholly

CC defined by having a statin response marker I; marketing a drug product

CC comprising a statin as at least one active ingredient for treating a

CC disease or condition in a population partially or wholly defined by

CC having a statin response marker I; an isolated polynucleotide comprising

CC a first nucleotide sequence which comprises an integrin, beta 3 (ITGB3)

CC isogene encoding a ITGB3 polypeptide, where the ITGB3 isogene consisting

CC of isogenes 1-38 and 40-98 defined by a correspondingly numbered

CC haplotype, where each of the isogenes comprises nucleotides 1000-2235,

CC 4256-4716, 1317913723, 14233-14858, 16126-16619, 16930-17414, 19241

CC 19644, 19748-20177, 2053721009, 21731-22412, 24385-24930, 25559-26029,

CC 27822-28255, 30265-30754, and 31300-31718 of the 32577-bp sequence,

CC except where substituted by the sequence of alleles for the

CC correspondingly numbered haplotype at the polymorphic sites whose

CC nucleotide positions in the 32577-bp sequence and a second nucleotide

CC sequence which is complementary to the first nucleotide sequence; a

CC recombinant nonhuman organism transformed or transfected with the

CC isolated polynucleotide, where the organism expresses an ITGB3

CC polypeptide encoded by the selected ITGB3 isogene; an isolated fragment

CC of an integrin, beta 3 (ITGB3) isogene, where the fragment comprises one

CC or more polymorphisms consisting of thymine at PS 1, guanine at PS2,

CC cytosine at PS3, thymine at PS4, cytosine at PS5, adenine at PS6, thymine

CC at PS7, thymine at PS8, guanine at PS9, adenine at PS10, adenine at PS11,

CC thymine at PS12, adenine at PS13, guanine at PS 16, adenine at PS 18,

CC thymine at PS 19, guanine at PS21, guanine at PS 16, adenine at PS 18,

CC cytosine at PS24, thymine at PS25: adenine at PS22, cytosine at PS23,

CC thymine at PS29, adenine at PS30, cytosine at PS31, guanine at PS32,

CC adenine at PS33, adenine at PS35, cytosine at PS37, thymine at PS38,

CC cytosine at PS39, adenine at PS40, thymine at PS41, thymine at PS42,

CC guanine at PS43 and guanine at PS44; a genome anthology for the integrin,

CC beta 3 (ITGB3) gene which comprises two or more ITGB3 isogenes consisting

CC of isogenes 1-98, where each of the selected isogenes is defined by a

CC correspondingly numbered haplotype given in the specification, and where

CC each of the isogenes comprises nucleotides 1000-2235, 4256-4716, 13179

CC 13723, 14235-14858, 16126-16619, 16930-17414, 19241-19644, 19748-20177,

CC 2053721009, 21731-22412, 24385-24930, 2555926029, 27822-28255, 30265-

CC 30754, and 31300-31718 of the 32577-bp sequence except where substituted

CC by the sequence of alleles for the correspondingly numbered haplotype at

CC each of file polymorphic sites; haplotyping the integrin, beta 3 (ITGB3)

CC gene of an individual; assigning a haplotype pair for the integrin, beta

CC 3 (ITGB3) gene to an individual; reducing the potential for bias in a

CC clinical trial of a candidate drug for treating a disease or condition

CC predicted to be associated with ITGB3 activity; an isolated polypeptide

CC comprising a ITGB3 protein variant consisting of protein variants A, B,

CC C, D, E, F and G and comprising 788-amino acid sequence, except where

CC substituted by the corresponding sequence of amino acids whose positions

CC and alleles are given in the specification; an isolated monoclonal

CC antibody specific for and immunoreactive with the selected ITGB3 protein

CC variant comprising the isolated polypeptide; screening for drugs

CC targeting the selected ITGB3 protein variant comprising the isolated

CC polypeptide; an isolated fragment of an ITGB3 protein variant, where the

CC fragment is at least 6 amino acids in length and comprises one or more

CC variant amino acids consisting of methionine at a position corresponding

CC to amino acid position 14, arginine at a position corresponding to amino

CC acid position 66, methionine at a position corresponding to amino acid

CC position 445, and glutamine at a position corresponding to amino acid

CC position 515 the 788-amino acid sequence; screening for drugs targeting

CC the selected ITGB3 protein variant comprising the isolated polypeptide;

CC screening for compounds targeting the ITGB3 protein to treat a condition

CC or disease predicted to be associated with ITGB3 activity; validating the

CC ITGB3 protein as a candidate target for treating a medical condition

CC predicted to be associated with ITGB3 activity; and an isolated

CC oligonucleotide designed for detecting a polymorphism in the integrin,

CC beta 3 (ITGB3) gene at a polymorphic site (PS) consisting of PS1-PS44,

CC where the oligonucleotide contains or is located one to several

CC nucleotides downstream of the selected PS, where the oligonucleotide has

CC a length of about 15 to about 100 nucleotides. Preferred Kit: The kit

CC further comprises a manual with instructions for performing one or more

CC reactions on a human nucleic acid sample to identify the allele(s)

CC present in the individual at each polymorphic site in the set of

CC polymorphic sites and determining if the individual has a statin response

CC marker I or a statin response marker II based on the identified

CC allele(s). The set of oligonucleotides is designated for identifying both

CC alleles at each polymorphic site of the selected set of polymorphic

CC sites. The set of PSs comprises PS3, PS12 and PS42; PS 1, PS12 and PS42;

CC PS3 and PS42; PS1 and PS42; PS1, PS3, PS12 and PS42; or PS39. The set of

CC PS is PS3, PS12 or PS42. The individual is Caucasian. The linkage

CC disequilibrium between the linked haplotype and any one of haplotypes 101

CC -194, 201-463 or 501-515 has r^2 consisting of at least 0.75. At least

CC 0.80, at least 0.85, at least 0.90, at least 0.95 or 1.0. At least one of

CC the oligonucleotides in the set of oligonucleotides is an allele-specific

CC oligonucleotide comprising a nucleotide sequence consisting of 10-15 bp.

CC The set of polymorphic sites is PS3, PS12, and PS42 and the set of

CC oligonucleotides comprises first, second and third allele-specific

CC oligonucleotide (ASO) probes, where the first ASO probe comprises 15-bp

CC sequence or its complement, and S in the 15-bp sequence is guanine; the

CC second ASO probe comprises 15-bp sequence, or its complement, and Y in the

CC 15-bp sequence is cytosine, and the third ASO probe comprises 15 bp,

CC or its complement, and Y in the 15-bp sequence is cytosine. Preferred

CC Article: The article of manufacture comprises a pharmaceutical

CC formulation and at least one indicium identifying a population for whom

CC the pharmaceutical formulation is indicated, where the pharmaceutical

CC formulation comprises a statin as at least one active ingredient and the

CC identified population is partially or wholly defined by having a statin

CC response marker I, where a trial population having the statin response

CC marker I exhibits a better HDLC response to the pharmaceutical

CC formulation than to treatment with atorvastatin or salt of atorvastatin

CC acid. It also comprises packaging material and a pharmaceutical

CC formulation contained within the packaging material, where the

CC pharmaceutical formulation comprises a statin as at least one separate

CC active ingredient, and the packaging material comprises an approved label

CC which states that the pharmaceutical formulation is indicated for a

CC population partly or wholly defined by having a statin response marker I,

CC where a trial population having the statin response marker exhibits a

CC better HDLC response to the pharmaceutical formulation than to treatment

CC with atorvastatin or a salt of atorvastatin acid. Preferred

CC Oligonucleotide: The isolated oligonucleotide is an allele-specific

CC oligonucleotide that specifically hybridizes to an allele of the ITGB3

CC gene at a region containing the polymorphic site. The isolated

CC oligonucleotide is a primer-extension oligonucleotide. The kit is for

CC haplotyping the integrin, beta 3 (ITGB3) gene of all individual,

CC comprises a set of oligonucleotides designed for identifying at least one

CC of the alleles at each polymorphic site (PS) in a set of two or more

CC polymorphic sites. Preferred Method: Determining whether an individual

CC has a statin response marker I or a statin response marker II comprises
CC determining the copy number in the individual of the haplotype, where if
CC the selected haplotype is one of haplotypes given in the specification,
CC then the individual has a statin response marker I if the individual has
CC at least one copy of the selected haplotype and a statin response marker
CC II if the individual has zero copy of the selected haplotype; and the
CC individual has a statin response marker I if the individual has zero or
CC one copy of the selected haplotype and a statin response marker II if the
CC individual has two copies of the selected haplotype. The individual is a
CC candidate for treatment with a statin. The determining step comprises
CC genotyping each polymorphic site in a set of polymorphic sites comprising
CC the selected haplotype and using the results of the genotyping step to
CC identify, for the set of polymorphic sites the haplotype pair present in
CC the individual. The determining step comprises consulting a data
CC repository, that provides information on the copy number present in the
CC individual for the selected haplotype. The data repository is the
CC individual's medical records or a medical data card. Assigning an
CC individual to a first or second statin response marker group comprises
CC determining the copy number in the individual or a haplotype and
CC assigning the individual to the first statin response marker group if the
CC individual has at least one copy of the selected haplotype and to the
CC second statin response marker group if the individual has zero copy of
CC the selected haplotype; and assigning the individual to the first statin
CC response marker group if the individual has zero or one copy of the
CC selected haplotype and to the second statin response marker group if the
CC individual has two copies of the selected haplotype. The determining step
CC comprises genotyping each polymorphic site in a set of polymorphic sites

Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GCGCGCGC 9
| | | | | | | |
Db 8 GCGCGCGC 1

RESULT 388
ADN89083/C
ID ADN89083 standard; DNA; 10 BP.
XX AC
XX ADN89083;
XX 15-JUL-2004 (first entry)
XX DE
XX Hyperlipidemia treatment associated human ITGB3 haplotype probe #148.
XX ss; probe; antilipemic; gene therapy; allele; polymorphic site;
KW integrin beta 3; ITGB3; statin response marker; hyperlipidemia.
XX
XX Homo sapiens.
XX OS
XX WO2004033710-A2.
XX PN
XX 22-APR-2004.
XX PD
XX 09-OCT-2003; 2003WO-US032361.
XX PF
XX 09-OCT-2002; 2002US-0417743P.
XX PR
XX (GENA-) GENAISSANCE PHARM INC.
XX PA
XX Bentivegna SC, Bieglecki KM, Brain CD, Dain BJ, Cappola G;
PI Judson RS, Lachowicz M, Lee HH, Litvyn L, Messer C, Petersen N;
PI Reed CR, Rounds EM, Russo DP, Windemuth AK;
XX
XX WPI; 2004-340942/31.
XX DR
XX New kit comprising a set of oligonucleotides, useful for determining
PT whether an individual has a statin response marker I or II for preparing
PT a composition for treating hyperlipidemia.
XX
XX Disclosure; SEQ ID NO 151; 202pp; English.
XX PS

XX
CC A kit comprising a set of oligonucleotides designed for identifying at
CC least one of the alleles at each polymorphic site (PS) in a set of 129
CC polymorphic sites (PSs) given in the specification, is new. The kit
CC identifies at least one of the alleles at each polymorphic site (PS) in a
CC set of 129 polymorphic sites (PSs) given in the specification, for
CC example: PS1 and PS42; PS19 and PS42; PS3, PS12, and PS42; a set of
CC polymorphic sites comprising a linked haplotype to any one of haplotypes
CC 101-194, 201-463 or 501-515 given in the specification, or a set of
CC polymorphic sites comprising a substitute haplotype for any one of
CC haplotypes 101-194, 201-463 or haplotypes 501-515 given in the
CC specification; where the nucleotide position of each polymorphic site
CC corresponds to the following nucleotide position in the 32577-bp
CC sequence: 1118 (PS1), 1773 (PS3), 1875 (PS4), 1911 (PS5), 1957 (PS6),
CC 2087 (PS10), 2157 (PS12), 33384 (PS15), 13405 (PS16), 16200 (PS19), 17194
CC (PS20), 17273 (PS21), 20035 (PS26), 20047 (PS28), 20615 (PS30), 21944
CC (PS32), 21155 (PS35), 25921 (PS37), 27882 (PS38), 27882 (PS39), and 30618
CC (PS42). INDEPENDENT CLAIMS are also included for: determining whether an
CC individual has a statin response marker I or a statin response marker II;
CC selecting a statin therapy to provide an optimal High Density Lipoprotein
CC Cholesterol (HDL-C) response in an individual; predicting an individual's
CC High Density Lipoprotein Cholesterol (HDL-C) response to treatment with a
CC statin; predicting an individual's High Density Lipoprotein Cholesterol
CC (HDL-C) response to treatment with a statin; manufacturing a drug product;
CC seeking regulatory approval for marketing a pharmaceutical formulation
CC for treating a disease or condition in a population partially or wholly
CC defined by having a statin response marker I; marketing a drug product
CC comprising a statin as at least one active ingredient for treating a
CC disease or condition in a population partially or wholly defined by
CC having a statin response marker I; an isolated polynucleotide comprising
CC a first nucleotide sequence which comprises an integrin, beta 3 (ITGB3)
CC isogene encoding a ITGB3 polypeptide, where the ITGB3 isogene consisting
CC of isogenes 1-38 and 40-98 defined by a correspondingly numbered
CC haplotype, where each of the isogenes comprises nucleotides 1000-2235,
CC 4256-4716, 1317913723, 14235-14858, 16126-16619, 16930-17414, 19241-
CC 19644, 19748-20177, 2053721009, 21731-22412, 24385-24930, 25559-26029,
CC 27822-28255, 30265-30754, and 31300-31718 of the 32577-bp sequence,
CC except where substituted by the sequence of alleles for the
CC correspondingly numbered haplotype at the polymorphic sites whose
CC nucleotide positions in the 32577-bp sequence and a second nucleotide
CC sequence which is complementary to the first nucleotide sequence; a
CC recombinant nonhuman organism transformed or transfected with the
CC isolated polynucleotide, where the organism expresses an ITGB3
CC polypeptide encoded by the selected ITGB3 isogene; an isolated fragment
CC of an integrin, beta 3 (ITGB3) isogene, where the fragment comprises one
CC or more polymorphisms consisting of thymine at PS 1, guanine at PS2,
CC cytosine at PS3, thymine at PS4, cytosine at PS5, adenine at PS6, thymine
CC at PS7, thymine at PS8, guanine at PS9, adenine at PS10, adenine at PS11,
CC thymine at PS12, adenine at PS13, guanine at PS 16, adenine at PS 18,
CC thymine at PS24, thymine at PS2 I, guanine at PS22, cytosine at PS23,
CC cytosine at PS29, adenine at PS25; adenine at PS26, adenine at PS27,
CC thymine at PS29, adenine at PS30, cytosine at PS31, guanine at PS32,
CC adenine at PS33, adenine at PS35, cytosine at PS37, thymine at PS38,
CC cytosine at PS39, adenine at PS40, thymine at PS41, thymine at PS42,
CC guanine at PS43 and guanine at PS44; a genome anthology for the integrin,
CC beta 3 (ITGB3) gene which comprises two or more ITGB3 isogenes consisting
CC of isogenes 1-98, where each of the selected isogenes is defined by a
CC correspondingly numbered haplotype given in the specification, and where
CC each of the isogenes comprises nucleotides 1000-2235, 4256-4716, 13179-
CC 13723, 14235-14858, 16126-16619, 16930-17414, 19241-19644, 19748-20177,
CC 2053721009, 21731-22412, 24385-24930, 2555926029, 27822-28255, 30265-
CC 30754, and 31300-31718 of the 32577-bp sequence except where substituted
CC by the sequence of alleles for the correspondingly numbered haplotype at
CC each of file polymorphic sites; haplotyping the integrin, beta 3 (ITGB3)
CC gene of an individual; assigning a haplotype pair for the integrin, beta
CC 3 (ITGB3) gene to an individual; reducing the potential for bias in a
CC clinical trial of a candidate drug for treating a disease or condition
CC predicted to be associated with ITGB3 activity; an isolated polypeptide
CC comprising a ITGB3 protein variant consisting of protein variants A, B,
CC C, D, E, F and G and comprising 788-amino acid sequence, except where
CC substituted by the corresponding sequence of amino acids whose positions
CC and alleles are given in the specification; an isolated monoclonal
CC antibody specific for and immunoreactive with the selected ITGB3 protein

variant comprising the isolated polypeptide; screening for drugs targeting the selected ITGB3 protein variant comprising the isolated polypeptide; an isolated fragment of an ITGB3 protein variant, where the fragment is at least 6 amino acids in length and comprises one or more variant amino acids consisting of methionine at a position corresponding to amino acid position 14, arginine at a position corresponding to amino acid position 66, methionine at a position corresponding to amino acid position 445, and glutamine at a position corresponding to amino acid position 515 the 788-amino acid sequence; screening for drugs targeting the selected ITGB3 protein variant comprising the isolated polypeptide; screening for compounds targeting the ITGB3 protein to treat a condition or disease predicted to be associated with ITGB3 activity; validating the ITGB3 protein as a candidate target for treating a medical condition predicted to be associated with ITGB3 activity; and an isolated oligonucleotide designed for detecting a polymorphism in the integrin, beta 3 (ITGB3) gene at a polymorphic site (PS) consisting of PS1-PS44, where the oligonucleotide contains or is located one to several nucleotides downstream of the selected PS, where the oligonucleotide has a length of about 15 to about 100 nucleotides. Preferred Kit: The kit further comprises a manual with instructions for performing one or more reactions on a human nucleic acid sample to identify the allele(s) present in the individual at each polymorphic site in the set of polymorphic sites and determining if the individual has a statin response marker I or a statin response marker II based on the identified allele(s). The set of oligonucleotides is designated for identifying both alleles at each polymorphic site of the selected set of polymorphic sites. The set of PSs comprises PS3, PS12 and PS42; PS 1, PS12 and PS42; PS3 and PS42; PS1 and PS42; PS1, PS3, PS12 and PS42; or PS39. The set of PS is PS3, PS12 or PS42. The individual is Caucasian. The linkage disequilibrium between the linked haplotype and any one of haplotypes 101-194, 201-463 or 501-515 has $\Delta G_{\text{gr}}/2$ consisting of at least 0.75, at least 0.80, at least 0.85, at least 0.90, at least 0.95 or 1.0. At least one of the oligonucleotides in the set of oligonucleotides is an allele-specific oligonucleotide comprising a nucleotide sequence consisting of 10-15 bp. The set of polymorphic sites is PS3, PS12, and PS42 and the set of oligonucleotides comprises first, second and third allele-specific oligonucleotide (ASO) probes, where the first ASO probe comprises 15-bp sequence, or its complement, and S in the 15-bp sequence is guanine; the second ASO probe comprises 15-bp sequence, or its complement, and Y in the 15-bp sequence is cytosine, and the third ASO probe comprises 15 bp, or its complement, and Y in the 15-bp sequence is cytosine. Preferred Article: The article of manufacture comprises a pharmaceutical formulation and at least one indicium identifying a population for whom the pharmaceutical formulation is indicated, where the pharmaceutical formulation comprises a statin as at least one active ingredient and the identified population is partially or wholly defined by having a statin response marker I, where a trial population having the statin response marker I exhibits a better HDLC response to the pharmaceutical formulation than to treatment with atorvastatin or a salt of atorvastatin acid. Preferred Oligonucleotide: The isolated oligonucleotide is an allele-specific oligonucleotide that specifically hybridizes to an allele of the ITGB3 gene at a region containing the polymorphic site. The isolated oligonucleotide is a primer-extension oligonucleotide. The kit is for haplotyping the integrin, beta 3 (ITGB3) gene of all individual, comprises a set of oligonucleotides designed for identifying at least one of the alleles at each polymorphic site (PS) in a set of two or more polymorphic sites. Preferred Method: Determining whether an individual has a statin response marker I or a statin response marker II comprises determining the copy number in the individual of the haplotype, where if the selected haplotype is one of haplotypes given in the specification, then the individual has a statin response marker I if the individual has at least one copy of the selected haplotype and a statin response marker II if the individual has zero copy of the selected haplotype; and the individual has a statin response marker I if the individual has zero or

one copy of the selected haplotype and a statin response marker II if the individual has two copies of the selected haplotype. The individual is a candidate for treatment with a statin. The determining step comprises genotyping each polymorphic site in a set of polymorphic sites comprising the selected haplotype and using the results of the genotyping step to identify, for the set of polymorphic sites the haplotype pair present in the individual. The determining step comprises consulting a data repository, that provides information on the copy number present in the individual's medical records or a medical data card. Assigning an individual to a first or second statin response marker group comprises determining the copy number in the individual or a haplotype and assigning the individual to the first statin response marker group if the individual has at least one copy of the selected haplotype and to the second statin response marker group if the individual has zero copy of the selected haplotype; and assigning the individual to the first statin response marker group if the individual has zero or one copy of the selected haplotype and to the second statin response marker group if the individual has two copies of the selected haplotype. The determining step comprises genotyping each polymorphic site in a set of polymorphic sites

Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGCGGGCG 9
DB 9 GGCGGGCG 2
|||||||

RESULT 389

AD576957

ID ADS76957 standard; DNA; 10 BP.

AC ADS76957;

DT 30-DEC-2004 (first entry)

DE Breast cancer detection oligonucleotide #739.

KW ss; primer; cytostatic; RNA interference; RNAi; gene silencing;

KW antisense oligonucleotide inhibitor; cathepsin K inhibitor;

KW cathepsin L inhibitor; cathepsin F inhibitor;

KW metalloprotease 2 inhibitor; thrombospondin-2 antagonist;

KW collagen antagonist; diagnosis; breast tissue; cancer.

OS Homo sapiens.

PN WO2004085621-A2.

PD 07-OCT-2004.

PF 22-MAR-2004; 2004WO-US008866.

PR 20-MAR-2003; 2003US-0456735P.

PA (DAND) DANA FARBER CANCER INST INC.

PI Polyak K, Porter D, Allinen M;

XX WPI; 2004-728732/71.

Diagnosing breast cancer comprises determining expression levels of a gene selected from those differentially expressed in normal or cancerous cells of a breast tissue sample including interleukin 1, thrombospondin 1 and cystatin C.

Example 2; SEQ ID NO 739; 149pp; English.

The invention relates to a method of diagnosis (M1) comprising: (a)

providing a test sample of breast tissue; (b) determining the level of

expression in the test sample of a gene (e.g. interleukin-8, superoxide

dismutase 2 and tubulin, alpha 3) selected from Table 1 given in the

CC specification, and (c) if the gene is expressed in the test sample at a
 CC lower level than in a control normal breast tissue sample, diagnosing the
 CC test sample as containing cancer cells. The method is used for diagnosing
 CC breast cancer. This sequence corresponds to an oligonucleotide primer
 CC used in the method of the invention.
 XX

SQ Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGGGCGG 9
 Db 3 GCGGGCGG 10

RESULT 390
 ADS76907/c
 ID ADS76907 standard; DNA; 10 BP.

XX
 AC ADS76907;
 XX
 DT 30-DEC-2004 (first entry)
 XX

DE Breast cancer detection oligonucleotide #689.

XX ss; primer; cytostatic; RNA interference; RNAi; gene silencing;
 KW antisense oligonucleotide inhibitor; cathepsin K inhibitor;
 KW cathepsin L inhibitor; cathepsin F inhibitor;
 KW metalloprotease 2 inhibitor; thrombospondin-2 antagonist;
 KW collagen antagonist; diagnosis; breast tissue; cancer.

XX Homo sapiens.

XX WO2004085621-A2.

XX 07-OCT-2004.

XX 22-MAR-2004; 2004WO-US008866.

XX 20-MAR-2003; 2003US-0456735P.

XX (DAND) DANA FARBER CANCER INST INC.

XX Polyak K, Porter D, Allinen M;

XX WPI; 2004-728732/71.

XX Diagnosing breast cancer comprises determining expression levels of a
 PT gene selected from those differentially expressed in normal or cancerous
 PT cells of a breast tissue sample including interleukin 1, thrombospondin 1
 PT and cystatin C.

PS Example 2; SEQ ID NO 689; 149pp; English.

XX The invention relates to a method of diagnosis (M1) comprising: (a)
 CC providing a test sample of breast tissue; (b) determining the level of
 CC expression in the test sample of a gene (e.g. interleukin-8, superoxide
 CC dismutase 2 and tubulin, alpha 3) selected from Table 1 given in the
 CC specification, and (c) if the gene is expressed in the test sample at a
 CC lower level than in a control normal breast tissue sample, diagnosing the
 CC test sample as containing cancer cells. The method is used for diagnosing
 CC breast cancer. This sequence corresponds to an oligonucleotide primer
 CC used in the method of the invention.

SQ Sequence 10 BP; 1 A; 6 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGGCGG 10

Db 10 GCGGGCGG 3

RESULT 391
 ADS76908/c
 ID ADS76908 standard; DNA; 10 BP.

XX
 AC ADS76908;

XX 30-DEC-2004 (first entry)

XX Breast cancer detection oligonucleotide #690.

XX ss; primer; cytostatic; RNA interference; RNAi; gene silencing;
 KW antisense oligonucleotide inhibitor; cathepsin K inhibitor;
 KW cathepsin L inhibitor; cathepsin F inhibitor;
 KW metalloprotease 2 inhibitor; thrombospondin-2 antagonist;
 KW collagen antagonist; diagnosis; breast tissue; cancer.

XX Homo sapiens.

XX WO2004085621-A2.

XX 07-OCT-2004.

XX 22-MAR-2004; 2004WO-US008866.

XX 20-MAR-2003; 2003US-0456735P.

XX (DAND) DANA FARBER CANCER INST INC.

XX Polyak K, Porter D, Allinen M;

XX WPI; 2004-728732/71.

XX Diagnosing breast cancer comprises determining expression levels of a
 PT gene selected from those differentially expressed in normal or cancerous
 PT cells of a breast tissue sample including interleukin 1, thrombospondin 1
 PT and cystatin C.

PS Example 2; SEQ ID NO 690; 149pp; English.

XX The invention relates to a method of diagnosis (M1) comprising: (a)
 CC providing a test sample of breast tissue; (b) determining the level of
 CC expression in the test sample of a gene (e.g. interleukin-8, superoxide
 CC dismutase 2 and tubulin, alpha 3) selected from Table 1 given in the
 CC specification, and (c) if the gene is expressed in the test sample at a
 CC lower level than in a control normal breast tissue sample, diagnosing the
 CC test sample as containing cancer cells. The method is used for diagnosing
 CC breast cancer. This sequence corresponds to an oligonucleotide primer
 CC used in the method of the invention.

SQ Sequence 10 BP; 1 A; 6 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GCGGGCGG 10
 Db 10 GCGGGCGG 3

RESULT 392
 ADS76958
 ID ADS76958 standard; DNA; 10 BP.

XX
 AC ADS76958;

XX 30-DEC-2004 (first entry)

XX Breast cancer detection oligonucleotide #740.

KW ss; primer; cytostatic; RNA interference; RNAi; gene silencing;
 KW antisense oligonucleotide inhibitor; cathepsin K inhibitor;
 KW cathepsin L inhibitor; cathepsin F inhibitor;
 KW metalloprotease 2 inhibitor; thrombospondin-2 antagonist;
 KW collagen antagonist; diagnosis; breast tissue; cancer.
 XX Homo sapiens.
 OS
 XX WO2004085621-A2.
 PN
 XX 07-OCT-2004.
 PD
 XX
 XX 22-MAR-2004; 2004WO-US008866.
 PF
 XX
 XX 20-MAR-2003; 2003US-0456735P.
 PR
 XX (DAND) DANA FARBER CANCER INST INC.
 PA
 XX Polyak K, Porter D, Allinen M;
 PI
 XX WPI; 2004-728732/71.
 DR
 XX Diagnosing breast cancer comprises determining expression levels of a
 PT gene selected from those differentially expressed in normal or cancerous
 PT cells of a breast tissue sample including interleukin 1, thrombospondin 1
 PT and cystatin C.
 PT
 XX Example 2; SEQ ID NO 740; 149pp; English.
 PS
 XX The invention relates to a method of diagnosis (M1) comprising: (a)
 CC providing a test sample of breast tissue; (b) determining the level of
 CC expression in the test sample of a gene (e.g. interleukin-8, superoxide
 CC dismutase 2 and tubulin, alpha 3) selected from Table 1 given in the
 CC specification, and (c) if the gene is expressed in the test sample at a
 CC lower level than in a control normal breast tissue sample, diagnosing the
 CC test sample as containing cancer cells. The method is used for diagnosing
 CC breast cancer. This sequence corresponds to an oligonucleotide primer
 CC used in the method of the invention.
 CC
 XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGGCG 9
 Db |||||
 3 GCGGGCG 10
 RESULT 393
 ADU18419
 ID ADU18419 standard; DNA; 10 BP.
 AC
 AC ADU18419;
 XX
 XX 13-JAN-2005 (first entry)
 DT
 XX Hypoxia-related tumorigenesis-related SAGE tag #210.
 DE
 XX screening; hypoxia-related tumorigenesis;
 KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.
 KW
 XX Unidentified.
 OS
 XX WO2004092198-A2.
 PN
 XX 28-OCT-2004.
 PD
 XX 09-APR-2004; 2004WO-US011087.
 PF
 XX 09-APR-2003; 2003US-0461712P.
 PR (GENZ) GENZYME CORP.
 PA
 XX Nacht M;
 XX WPI; 2004-758333/74.
 DR
 XX Identifying agents that alter biological activity of a polypeptide
 PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
 PT comprises contacting an agent with a target cell and monitoring activity
 PT of expressed product.
 PT
 XX Disclosure; Page 100; 100pp; English.
 PS
 XX The invention comprises a method of screening for candidate agents
 CC capable of altering the biological activity of a protein encoded by a
 CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
 CC invention involves: contacting a test agent with a target cell expressing
 CC the nucleotide, and monitoring the activity of the expressed protein
 CC product; if the test agent modifies the activity of the expressed protein
 CC then this is a candidate agent. The method of the invention is useful for
 CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
 CC or treating tumours. The present DNA sequence represents a SAGE tag that
 CC was used in the exemplification of the invention.
 CC
 XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGGCG 9
 Db |||||
 3 GCGGGCG 10
 RESULT 394
 ADU20349
 ID ADU20349 standard; DNA; 10 BP.
 AC
 AC ADU20349;
 XX
 XX 13-JAN-2005 (first entry)
 DT
 XX Hypoxia-related tumorigenesis-related SAGE tag #2140.
 DE
 XX screening; hypoxia-related tumorigenesis;
 KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.
 KW
 XX Unidentified.
 OS
 XX WO2004092198-A2.
 PN
 XX 28-OCT-2004.
 PD
 XX 09-APR-2004; 2004WO-US011087.
 PF
 XX 09-APR-2003; 2003US-0461712P.
 PR (GENZ) GENZYME CORP.
 PA
 XX Nacht M;
 XX WPI; 2004-758333/74.
 DR
 XX Identifying agents that alter biological activity of a polypeptide
 PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
 PT comprises contacting an agent with a target cell and monitoring activity
 PT of expressed product.
 PT
 XX Disclosure; Page 100; 100pp; English.
 PS
 XX The invention comprises a method of screening for candidate agents
 CC

XX (GENZ) GENZYME CORP.
 PA
 XX Nacht M;
 PI
 XX WPI; 2004-758333/74.
 XX
 XX Identifying agents that alter biological activity of a polypeptide
 PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis,
 PT comprises contacting an agent with a target cell and monitoring activity
 PT of expressed product.
 PT
 XX Disclosure; Page 60; 100pp; English.
 PS
 XX The invention comprises a method of screening for candidate agents
 CC capable of altering the biological activity of a protein encoded by a
 CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
 CC invention involves: contacting a test agent with a target cell expressing
 CC the nucleotide, and monitoring the activity of the expressed protein
 CC product; if the test agent modifies the activity of the expressed protein
 CC then this is a candidate agent. The method of the invention is useful for
 CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
 CC or treating tumours. The present DNA sequence represents a SAGE tag that
 CC was used in the exemplification of the invention.
 CC
 XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 50.0%; Score 8; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GCGGGCG 9
 Db |||||
 3 GCGGGCG 10
 RESULT 394
 ADU20349
 ID ADU20349 standard; DNA; 10 BP.
 AC
 AC ADU20349;
 XX
 XX 13-JAN-2005 (first entry)
 DT
 XX Hypoxia-related tumorigenesis-related SAGE tag #2140.
 DE
 XX screening; hypoxia-related tumorigenesis;
 KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.
 KW
 XX Unidentified.
 OS
 XX WO2004092198-A2.
 PN
 XX 28-OCT-2004.
 PD
 XX 09-APR-2004; 2004WO-US011087.
 PF
 XX 09-APR-2003; 2003US-0461712P.
 PR (GENZ) GENZYME CORP.
 PA
 XX Nacht M;
 XX WPI; 2004-758333/74.
 DR
 XX Identifying agents that alter biological activity of a polypeptide
 PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
 PT comprises contacting an agent with a target cell and monitoring activity
 PT of expressed product.
 PT
 XX Disclosure; Page 100; 100pp; English.
 PS
 XX The invention comprises a method of screening for candidate agents
 CC

CC capable of altering the biological activity of a protein encoded by a
CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
CC invention involves: contacting a test agent with a target cell expressing
CC the nucleotide, and monitoring the activity of the expressed protein
CC product; if the test agent modifies the activity of the expressed protein
CC then this is a candidate agent. The method of the invention is useful for
CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
CC or treating tumours. The present DNA sequence represents a SAGE tag that
CC was used in the exemplification of the invention.

XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02; Indels 0; Gaps 0;
Matches 8; Conservative 0; Mismatches 0;

QY 2 GCGGGCGC 9
Db 3 GCGGGCGC 10
|||||

RESULT 395
ADU19772
ID ADU19772 standard; DNA; 10 BP.
XX AC ADU19772;
XX DT 13-JAN-2005 (first entry)
XX DE Hypoxia-related tumorigenesis-related SAGE tag #1563.
XX KW screening; hypoxia-related tumorigenesis;
XX KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.
XX OS Unidentified.
XX PN WO2004092198-A2.
XX PD 28-OCT-2004.
XX PF 09-APR-2004; 2004WO-US011087.
XX PR 09-APR-2003; 2003US-0461712P.
XX PA (GENZ) GENZYME CORP.
XX PI Nacht M;
XX DR WPI; 2004-758333/74.
XX PT Identifying agents that alter biological activity of a polypeptide
XX PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
XX PT comprises contacting an agent with a target cell and monitoring activity
XX PT of expressed product.
XX PS Disclosure; Page 86; 100pp; English.

XX The invention comprises a method of screening for candidate agents
CC capable of altering the biological activity of a protein encoded by a
CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
CC invention involves: contacting a test agent with a target cell expressing
CC the nucleotide, and monitoring the activity of the expressed protein
CC product; if the test agent modifies the activity of the expressed protein
CC then this is a candidate agent. The method of the invention is useful for
CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
CC or treating tumours. The present DNA sequence represents a SAGE tag that
CC was used in the exemplification of the invention.

XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02; Indels 0; Gaps 0;
Matches 8; Conservative 0; Mismatches 0;

QY 2 GCGGGCGC 9
Db 3 GCGGGCGC 10
|||||

RESULT 396
ADU67738
ID ADU67738 standard; DNA; 10 BP.
XX AC ADU67738;
XX DT 10-FEB-2005 (first entry)
XX DE Human annexins, AnxA8 ZFP binding site oligonucleotide.
XX KW ZFP; zinc finger protein; toxicity; annexins; AnxA8; ss.
XX OS Homo sapiens.

XX PN US2004235002-A1.
XX PD 25-NOV-2004.
XX PF 18-SEP-2003; 2003US-00666923.
XX PR 20-SEP-2002; 2002US-0412345P.
XX PA (SANG-) SANGAMO BIOSCIENCES INC.
XX PI Holmes M, Tse C;
XX DR WPI; 2004-832939/82.
XX PT Screening compound by contacting compound with cell having polynucleotide
XX PT encoding fusion protein of functional domain and engineered zinc finger
XX PT protein targeted to endogenous cellular gene, to measure expression of
XX PT endogenous genes.

XX Example 2; SEQ ID NO 32; 44pp; English.
XX The present invention relates to a method of screening a compound. The
XX method involves contacting the compound with a cell having a first and
XX second polynucleotide encoding fusion protein of first and second
XX functional domain and first and second engineered zinc finger protein
XX (ZFP) targeted to a first and second endogenous cellular gene and
XX measuring expression of the first and second endogenous genes. The
XX invention is useful for screening a compound for its specificity,
XX toxicity or metabolic properties by utilising a cell e.g., mammalian cell
XX and for screening a compound utilised as agonist or antagonist of human
XX hormone receptor. The present sequence is human annexins, AnxA8 binding
XX site oligonucleotide. This sequence is used in the multiplex screening
XX assay.

XX Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
SQ Query Match 50.0%; Score 8; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 2.1e+02; Indels 0; Gaps 0;
Matches 8; Conservative 0; Mismatches 0;

QY 4 CGGGCGGC 11
Db 1 CGGGCGGC 8
|||||

RESULT 397
AA54772
ID AA54772 standard; DNA; 11 BP.
XX AC AA54772;
XX DT 05-JUL-1999 (first entry)
XX

DE Endothelial nitric oxide synthase antisense oligonucleotide.
 XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.
 XX
 OS Synthetic.
 XX
 XX WO9913886-A1.
 XX
 XX 25-MAR-1999.
 PD
 XX 17-SEP-1998; 98WO-US019419.
 XX
 XX 17-SEP-1997; 97US-0059160P.
 PR
 PR 09-JUN-1998; 98US-00093972.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX Nyce JW;
 PI
 PI WPI; 1999-229400/19.
 DR
 XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.
 PT
 XX Disclosure; Page 61; 120pp; English.
 PS
 XX The specification describes antisense oligonucleotides (AA52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AA55272-74. These multiple target oligonucleotides
 CC (specifically AA55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 SQ Sequence 11 BP; 0 A; 4 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 50.0%; Score 8; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGCGGC 8
 Db 4 CGCGCGGC 11
 RESULT 398
 AAA34219
 ID AAA34219 standard; DNA; 11 BP.
 XX
 AC AAA34219;
 XX

DT 28-JUL-2000 (first entry)
 XX Human adenosine receptor related polynucleotide SEQ ID NO:1908.
 DE
 DE Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiasthmatic; antiallergic; cytosolic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200009525-A2.
 PN
 XX 24-FEB-2000.
 PD
 XX 03-AUG-1999; 99WO-US017712.
 XX
 XX 03-AUG-1998; 98US-0095212P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX Nyce JW;
 PI
 PI WPI; 2000-205971/18.
 DR
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 PS Disclosure; Page 505; 1343pp; English.
 XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytosolic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
 CC carcinomas, and cancers which may metastasize to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 11 BP; 0 A; 4 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 50.0%; Score 8; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGCGCGGC 8
 Db 4 CGCGCGGC 11

RESULT 399
AAF20341
ID AAF20341 standard; DNA; 11 BP.
XX
AC AAF20341;
XX
DT 14-MAR-2001 (first entry)
XX
DE Human endothelial nitric oxide synthase polynucleotide fragment #1908.
XX
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosstatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
OS Homo sapiens.
XX
PN WQ200062736-A2.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008020.
XX
PR 06-APR-1999; 99US-0127958P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
PI Nyce JW;
XX
DR WPI; 2000-679539/66.
XX
PT Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
PS Claim 14; Page 251; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytosstatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention

XX
SQ Sequence 11 BP; 0 A; 4 C; 7 G; 0 T; 0 U; 0 Other;
XX
Query Match 50.0%; Score 8; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 CGCGGGGC 8
DB 4 CGCGGGGC 11
XX
RESULT 400
ABV70698
ID ABV70698 standard; cDNA; 11 BP.
XX
AC ABV70698;
XX
DT 21-OCT-2002 (first entry)
XX
DE Human skin EST 8484.
XX
KW Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhoeic;
KW immunosuppressive; antiinflammatory; cytosstatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
OS Homo sapiens.
XX
PN WQ200253774-A2.
XX
PD 11-JUL-2002.
XX
PF 20-DEC-2001; 2001WO-EP015179.
XX
PR 03-JAN-2001; 2001DE-01000127.
XX
PA (HENK) HENKEL KGAA.
XX
PI Petersohn D, Conradt M, Hofmann K;
XX
DR WPI; 2002-590638/63.
XX
PT In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer.
XX
PS Claim 24; Page 271; 1345pp; German.
XX
CC The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention
XX
SQ Sequence 11 BP; 0 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
XX
Query Match 50.0%; Score 8; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2 GCGCGGCG 9
DB 3 GCGCGGCG 10
XX
RESULT 401

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ABV68955/c
ID ABV68955 standard; cDNA; 11 BP.
AC ABV68955;
XX
XX 21-OCT-2002 (first entry)
DT
DE Human skin EST 6741.
XX
XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaeic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200253774-A2.
PN
XX
XX 11-JUL-2002.
PD
XX
XX 20-DEC-2001; 2001WO-EP015179.
PF
XX
XX '03-JAN-2001; 2001DE-01000127.
XX
XX (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Conradt M, Hofmann K;
PI
XX
XX WPI; 2002-590638/63.
DR
XX
XX In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer.
XX
XX Disclosure; Page 212; 1345pp; German.
XX
XX The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention
XX
XX Sequence 11 BP; 1 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
SQ
Query Match 50.0%; Score 8; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGCGGCGC 8
Db 9 CGGCGGCGC 2

RESULT 402
ABV63277
ID ABV63277 standard; cDNA; 11 BP.
AC
XX
XX ABV63277;
AC
XX
XX 21-OCT-2002 (first entry)
DT
XX
XX Human skin EST 1063.
DE
XX
XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaeic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
XX

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```

OS Homo sapiens.
XX
XX WO200253774-A2.
PN
XX
XX 11-JUL-2002.
PD
XX
XX 20-DEC-2001; 2001WO-EP015179.
PF
XX
XX 03-JAN-2001; 2001DE-01000127.
XX
XX (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Conradt M, Hofmann K;
PI
XX
XX WPI; 2002-590638/63.
DR
XX
XX In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer.
XX
XX Disclosure; Page 54; 1345pp; German.
XX
XX The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention
XX
XX Sequence 11 BP; 0 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 50.0%; Score 8; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GCGCGGCGC 9
Db 3 GCGCGGCGC 10

RESULT 403
ABZ96035
ID ABZ96035 standard; DNA; 11 BP.
XX
XX
XX ABZ96035;
AC
XX
XX 17-OCT-2003 (first entry)
DT
XX
XX Human endothelial nitric oxide synthase antisense fragment no.1895.
DE
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX
XX WO200285308-A2.
PN
XX
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013135.
PF
XX
XX 24-APR-2001; 2001US-0286137P.
PR
XX

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```

PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 11277; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the WIPO
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 11 BP; 0 A; 4 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGCGGGC 8
Db 4 CGGCGGGC 11

RESULT 404
ABD19675
ID ABD19675 standard; DNA; 11 BP.
XX
XX ABD19675;
AC
XX
XX 29-JUL-2004 (first entry)
DT
XX
XX Human endothelial nitric oxide synthase fragment 1895.
DE
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
XX Homo sapiens.
OS
XX
XX WO200285309-A2.
FN
XX
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013143.
PF
XX

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PR 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 11277; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 11 BP; 0 A; 4 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 50.0%; Score 8; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGCGGGC 8
Db 4 CGGCGGGC 11

RESULT 405
ADQ34850/c
ID ADQ34850 standard; DNA; 11 BP.
XX
XX ADQ34850;
AC
XX
XX 23-SEP-2004 (first entry)
DT
XX
XX Human facial skin-associated DNA fragment SEQ ID NO 2940.
DE
XX
XX facial skin; human; serial analysis of gene expression; SAGE;
KW homeostasis; biochip; cosmetic; pharmaceutical; ds.
XX
XX Homo sapiens.
OS
XX

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PN DE10260928-A1.
XX
PD
XX
XX 08-JUL-2004.
XX
XX
XX 20-DEC-2002; 2002DE-01060928.
XX
XX 20-DEC-2002; 2002DE-01060928.
XX
XX (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Schlottmann K, Gassenmeier T, Holtkoetter O;
XX Conradt M, Hofmann K;
XX
XX WPI; 2004-518855/50.
XX
XX In vitro identification of genes important for facial skin, useful for
XX assessing homeostasis and in screening for pharmaceutical or cosmetic
XX agents, based on differential expression analysis.
XX
XX Claim 4; SEQ ID NO 2940; 577pp; German.
XX
XX This invention describes a novel in vitro method for identifying genes
XX that are significant for facial skin in humans. The method comprises
XX recovering, from facial skin, a first mixture of genetically expressed
XX (transcribed and optionally translated) factors (i.e. proteins, mRNA or
XX their fragments), recovering a second, similar mixture from some other
XX human tissue, preferably skin from a protected area, especially from the
XX breast and subjecting the mixtures to serial analysis of gene expression
XX (SAGE) to identify those genes for which expression is markedly different
XX between facial skin and the other tissue. The invention also describes an
XX in vitro method for determining homeostasis of human facial skin; a test
XX kit which comprises a solid support (flexible or rigid) on which are
XX immobilised probes that bind specifically to the factors of interest and
XX a biochip for determining homeostasis of human facial skin. The products
XX of the invention are also used in a method which determines activity of
XX cosmetic and pharmaceutical agents for use against disorders or
XX disturbances of the homeostasis of human skin and a screening method for
XX identifying cosmetic and pharmaceutical agents. The method allows
XX identification of as many as possible of the genes important for facial
XX skin and thus of a very wide range of potential therapeutic and cosmetic
XX agents. ADQ31911-ADQ35111 represent human DNA Tag fragments used to
XX identify the facial skin-associated genes described in the invention.
XX
XX SQ Sequence 11 BP; 1 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 50.0%; Score 8; DB 1; Length 11;
XX Best Local Similarity 100.0%; Pred. No. 2.4e+02;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 CGGCGGGC 8
XX |||||
XX 9 CGGCGGGC 2
XX
XX Db
XX
XX RESULT 406
XX AAQ71041
XX ID AAQ71041 standard; DNA; 11 BP.
XX
XX AC AAQ71041;
XX
XX XX 25-MAR-2003 (revised)
XX DT 21-MAR-1995 (first entry)
XX
XX XX Half-site oligonucleotide ON-370 for random dodecamer peptide insert.
XX
XX antibody panning; random peptide library; ligand screening; dynorphin B;
XX linker; dodecamer peptide; ss.
XX
XX Synthetic.
XX
XX OS
XX
XX XX US5338665-A.
XX PN
XX XX 16-AUG-1994.
XX PD

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XX 15-OCT-1992; 92US-00963321.
XX PF
XX
XX 16-OCT-1991; 91US-00778233.
XX PR
XX
XX (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX PA
XX
XX Stemmer WPC, Schatz PJ;
XX PI
XX
XX WPI; 1994-263274/32.
XX DR
XX
XX Construction of random peptide library - by creating vectors contg. DNA
XX encoding the random peptide(s) fused to DNA binding proteins; used to
XX screen for novel ligands.
XX
XX Example 1; Col 26; 45pp; English.
XX PS
XX
XX Complementary oligonucleotides ON-335 and ON-336 (AAQ71038 and AAQ71039)
XX replaced a SfiI-HindIII dynorphin B fragment of pMC3 (see AAQ71036-7). A
XX random dodecamer peptide library was constructed by replacing the ON-
XX 335/336 insert by oligonucleotides ON-332, -370 and -369 (AAQ71040-2,
XX respectively). ON-370 and ON-369 annealed to ON-332 to produce SfiI and
XX HindIII-compatible ends but the ligated product does not have either
XX recognition sequence. The random peptide library was panned with an
XX antibody specific for dynorphin B and peptides were identified which
XX possessed homology to the dynorphin B epitope. (Updated on 25-MAR-2003 to
XX correct PF field.)
XX
XX SQ Sequence 11 BP; 1 A; 5 C; 4 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 48.8%; Score 7.8; DB 1; Length 11;
XX Best Local Similarity 81.8%; Pred. No. 2.6e+02;
XX Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 6 GCGCGCATCGT 16
XX |||||
XX 1 GCGCGCATCGT 11
XX
XX Db
XX
XX RESULT 407
XX AAT14738
XX ID AAT14738 standard; DNA; 11 BP.
XX
XX AC AAT14738;
XX
XX XX 25-MAR-2003 (revised)
XX DT 21-NOV-1996 (first entry)
XX
XX XX ON-369 for random dodecamer peptide library construction.
XX
XX XX dynorphin B; random peptide library; construction; monoclonal antibody;
XX D32.39; epitope; screening; pM3; pMCS; primer; PCR; ss.
XX
XX Synthetic.
XX
XX OS
XX
XX XX US5498530-A.
XX PN
XX
XX PD 12-MAR-1996.
XX
XX XX 15-AUG-1994; 94US-00290641.
XX PF
XX
XX 16-OCT-1991; 91US-00778233.
XX PR
XX 15-OCT-1992; 92US-00963321.
XX
XX (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX PA
XX
XX Stemmer WPC, Miller JF, Schatz PJ, Cull MG;
XX PI
XX
XX WPI; 1996-159686/16.
XX DR
XX
XX Random peptide libraries comprising host cells expressing DNA binding
XX proteins fused with random peptide(s) - used to identify, e.g. peptide
XX ligands of receptors.
XX
XX PT

```

XX Example 2; Col 25; 46pp; English.

PS A random peptide (RP) library can be constructed by transforming host

XX cells with a collection of recombinant vectors that encode a fusion

CC protein comprised of a DNA binding protein (BP) and a RP and also

CC contains a binding site for the DNA BP. The RP library can be used to

CC screen for novel ligands, the method resulting in the formation of a

CC complex comprising the fusion protein bound to a receptor through the RP

CC ligand and to the recombinant DNA vector through the DNA BP. AAT14737,

CC encoding a random dodecamer peptide, was synthesised and purified by HPLC

CC and phosphorylated with T4 kinase. Two half-site oligonucleotides

CC (AAT14738-39) were phosphorylated during synthesis and annealed to

CC AAT14737 to produce SfiI and HindIII-compatible ends, resp., but the

CC ligated product does not have either recognition sequence. (Updated on 25

CC -MAR-2003 to correct PF field.)

XX

SQ Sequence 11 BP; 1 A; 5 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 48.8%; Score 7.8; DB 1; Length 11;

Best Local Similarity 81.8%; Pred. No. 2.6e+02;

Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 6 GCGGCATCGT 16

DB 1 GCGGCACCGT 11

RESULT 408

AAT91967/c

ID AAT91967 standard; RNA; 11 BP.

XX

AC AAT91967;

XX

DT 13-FEB-1998 (first entry)

DE

DE RNA sequence disclosed in patent on miniribozymes.

XX

XX miniribozyme; ribozyme; dimer; cleavage; disease; treatment; ss.

XX

OS Synthetic.

XX

PN JP09224673-A.

XX

PD 02-SEP-1997.

XX

PF 22-FEB-1996; 96JP-00034898.

XX

PR 22-FEB-1996; 96JP-00034898.

XX

XX (AGEN) AGENCY OF IND SCI & TECHNOLOGY.

PA (HITB) HITACHI CHEM CO LTD.

PA (TAIS) TAISHO PHARM CO LTD.

XX

XX WPI; 1997-553198/51.

XX

PT Two mini ribozymes which hybridise to form a new heterodimer - useful for

PT cleavage and inactivation of a target DNA, especially for diagnosis and

PT treatment of genetic disease.

XX

PS Disclosure; Page 12; 15pp; Japanese.

XX

CC The following mini-ribozymes of formulae (I) and (II) are new: 3'-

CC Qln. . .Q12 Q11 A A G L V Q21 Q22. . .Q2m-5' (I); and 3'-Rln. . .R12 R11 W M

CC A G U G U C R21 R22. . .R2m-5' (II); Y = A, G, C or U; L = (3')-C-(5')

CC and M = (3')-G-(5') or L = (3')-C Np-(5') and M = (3')-N'p G-(5'); N = A,

CC U, G or C and N' = the complementary nucleotides of N; p = 1-10 (same for

CC both N and N'); V = (3')-AGAGUC-(5') and W = (3')-AAG-(5') or V,W = a

CC bond; Q and R are RNA or RNA mononucleotides complementary to a target

CC RNA; Qln. . .Q12 Q11 with Rln. . .R12 R11 and Q21 Q22. . .Q2m with R21

CC R22. . .R2m are same or different; m, n = an integer. Miniribozyme dimers

CC of the formula (I/II) are also claimed and have a two-part binding region

CC for target RNA and L and M are base-paired to form a stem structure. The

CC mini-ribozymes and the dimer they form can be used for cleavage and

CC inactivation of RNA. They are also useful as agents for treatment or

CC diagnosis of a genetic disease. The present sequence was disclosed in the

CC sequence ID listing of the specification

XX

SQ Sequence 11 BP; 0 A; 7 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 48.8%; Score 7.8; DB 1; Length 11;

Best Local Similarity 81.8%; Pred. No. 2.6e+02;

Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CGCGGCGCGC 11

DB 11 CGCGGACGGC 1

RESULT 409

AAS02829/c

ID AAS02829 standard; DNA; 11 BP.

XX

AC AAS02829;

XX

DT 29-AUG-2001 (first entry)

DE

DE Human pregnane X receptor (hPXR) gene, PCR primer #99.

XX

XX Human; pregnane X receptor; hPXR; PCR primer; diagnostic; cancer;

KW therapeutic; chemotherapy; gene therapy; ss.

XX

OS Homo sapiens.

XX

PN WO200120026-A2.

XX

PD 22-MAR-2001.

XX

PF 08-SEP-2000; 2000WO-EP008827.

XX

PR 10-SEP-1999; 99EP-00118120.

XX

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX

XX Wojnowski L, Hustert E;

XX

DR WPI; 2001-273428/28.

XX

PT Novel variant of the human pregnane X receptor gene, associated with

PT insufficient metabolism and/or sensitivity to drugs, is useful for

PT diagnosing and treating diseases with drugs that are modulators of their

PT gene product.

XX

PS Claim 37; Page 45; 108pp; English.

XX

CC AAS02731-AAS02909 represent human pregnane X receptor (hPXR) coding

CC sequences and PCR primers of the invention. The human pregnane X receptor

CC sequences are used to make antibodies or a substance capable of binding

CC specifically to the gene product of hPXR gene, for diagnosing and

CC treating various diseases, such as cancer, with drugs that are

CC substrates, inhibitors or modulators of the hPXR gene product. The

CC proteins can be used to identify and obtain prodrugs and drugs for

CC treatment of diseases which are amenable to chemotherapy. The nucleic

CC acids can be used in gene therapy for the treatment or prevention of

CC disorders associated with hPXR expression

XX

SQ Sequence 11 BP; 1 A; 5 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 48.8%; Score 7.8; DB 1; Length 11;

Best Local Similarity 81.8%; Pred. No. 2.6e+02;

Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 CGCGGCGGCAT 13

DB 11 GAGAGCGGCAT 1

XX WPI; 2002-590638/63.
 XX
 XX In vitro identification of skin-expressed genes, useful for determining
 PT homeostasis and identifying cosmetic or pharmaceutical agents against
 PT e.g. skin cancer.
 XX
 XX Disclosure; Page 62; 1345pp; German.
 XX
 XX The invention relates to in vitro identification (M1) of genes expressed
 CC in the skin of humans or animals by subjecting a mixture of genetically
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)
 CC so as to identify skin-expressed genes and quantify their expression.
 CC (M1) is useful for identifying genes involved in skin homeostasis; to
 CC determine skin homeostasis and to test agent (A) that maintains or
 CC promotes skin homeostasis or that can be used for treating skin
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
 CC skin. The present sequence is that of a human expressed sequence tag
 CC (EST) of the invention
 XX
 XX Sequence 11 BP; 2 A; 4 C; 4 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 48.8%; Score 7.8; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 2.6e+02;
 Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCAT 13
 Db 11 GCGTGGCCAT 1
 ||| ||| |||
 RESULT 413
 ABV68857/c
 ID ABV68857 standard; cDNA; 11 BP.
 XX
 AC ABV68857;
 XX
 XX 21-OCT-2002 (first entry)
 DT
 DE Human skin EST 6643.
 XX
 XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200253774-A2.
 PN
 XX 11-JUL-2002.
 PD
 XX 20-DEC-2001; 2001WO-EP015179.
 PF
 XX 03-JAN-2001; 2001DE-01000127.
 PR
 XX (HENK) HENKEL KGAA.
 PA
 XX Petersohn D, Conradt M, Hofmann K;
 PI
 XX WPI; 2002-590638/63.
 DR
 XX In vitro identification of skin-expressed genes, useful for determining
 PT homeostasis and identifying cosmetic or pharmaceutical agents against
 PT e.g. skin cancer.
 XX
 XX Disclosure; Page 210; 1345pp; German.
 XX
 XX The invention relates to in vitro identification (M1) of genes expressed
 CC in the skin of humans or animals by subjecting a mixture of genetically
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)
 CC so as to identify skin-expressed genes and quantify their expression.

CC (M1) is useful for identifying genes involved in skin homeostasis; to
 CC determine skin homeostasis and to test agent (A) that maintains or
 CC promotes skin homeostasis or that can be used for treating skin
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
 CC skin. The present sequence is that of a human expressed sequence tag
 CC (EST) of the invention
 XX
 XX Sequence 11 BP; 1 A; 5 C; 5 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 48.8%; Score 7.8; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 2.6e+02;
 Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 CCGCGGGCGGC 11
 Db 11 CCGCGGGCTGC 1
 ||| ||| |||
 RESULT 414
 ABV67255/c
 ID ABV67255 standard; cDNA; 11 BP.
 XX
 AC ABV67255;
 XX
 XX 21-OCT-2002 (first entry)
 DT
 XX Human skin EST 5041.
 DE
 XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200253774-A2.
 PN
 XX 11-JUL-2002.
 PD
 XX 20-DEC-2001; 2001WO-EP015179.
 PF
 XX 03-JAN-2001; 2001DE-01000127.
 PR
 XX (HENK) HENKEL KGAA.
 PA
 XX Petersohn D, Conradt M, Hofmann K;
 PI
 XX WPI; 2002-590638/63.
 DR
 XX In vitro identification of skin-expressed genes, useful for determining
 PT homeostasis and identifying cosmetic or pharmaceutical agents against
 PT e.g. skin cancer.
 XX
 XX Disclosure; Page 164; 1345pp; German.
 XX
 XX The invention relates to in vitro identification (M1) of genes expressed
 CC in the skin of humans or animals by subjecting a mixture of genetically
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)
 CC so as to identify skin-expressed genes and quantify their expression.
 CC (M1) is useful for identifying genes involved in skin homeostasis; to
 CC determine skin homeostasis and to test agent (A) that maintains or
 CC promotes skin homeostasis or that can be used for treating skin
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
 CC skin. The present sequence is that of a human expressed sequence tag
 CC (EST) of the invention
 XX
 XX Sequence 11 BP; 0 A; 7 C; 3 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 48.8%; Score 7.8; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 2.6e+02;


```

Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GCGGGCGGCCA 12
Db 11 GCGGGCGGCCA 1

RESULT 415
ABV70999/c
ID ABV70999 standard; cDNA; 11 BP.
AC
XX
AC ABV70999;
XX
DT 21-OCT-2002 (first entry)
XX
DE Human skin EST 8785.
XX
KW Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
OS Homo sapiens.
XX
XX WO200253774-A2.
XX
PD 11-JUL-2002.
XX
PF 20-DEC-2001; 2001WO-EP015179.
XX
PR 03-JAN-2001; 2001DE-01000127.
XX
PA (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Conradt M, Hofmann K;
XX
XX WPI; 2002-590638/63.
XX
PT In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer.
XX
PS Claim 24; Page 282; 1345pp; German.
XX
CC The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention
XX
SQ Sequence 11 BP; 2 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 2.6e+02;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GCGGGCGGCAT 13
Db 11 GCGTGCGCAT 1

RESULT 416
AAL40464/c
ID AAL40464 standard; RNA; 11 BP.
XX
AC AAL40464;
XX

```

```

DT 19-SEP-2002 (first entry)
XX
DE Maxizyme related heterodimeric maxizyme RNA substrate sequence #1.
XX
KW Enzyme; modifiable RNA cleavage activity; maxizyme-constituting RNA;
KW trans maxizyme; heterodimeric maxizyme RNA substrate; ss.
XX
OS Unidentified.
XX
XX Key Location/Qualifiers
XX misc_binding 1..5
XX /tag= a
XX /bound_moiety= "MzL RNA"
XX /note= "Forms a double-stranded region with nucleotides
XX 24-20 of sequence AAL40460"
XX misc_binding 7..11
XX /tag= b
XX /bound_moiety= "MzR RNA"
XX /note= "Forms a double-stranded region with nucleotides 5
XX -1 of sequence AAL40465"
XX
PN JP2002119283-A.
XX
XX 23-APR-2002.
XX
PF 13-OCT-2000; 2000JP-00313320.
XX
PR 13-OCT-2000; 2000JP-00313320.
XX
PA (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
XX
XX WPI; 2002-483792/52.
XX
XX A nucleic acid enzyme which has selective and effective eradicating
XX activity towards harmful cells by acquiring cleavage activity of a
XX specific target RNA by recognition of the other RNA molecule.
XX
XX Disclosure; Fig 1; 17pp; Japanese.
XX
XX The invention relates to a nucleic acid enzyme with modifiable RNA
XX cleavage activity. More specifically the invention relates to a nucleic
XX acid enzyme, trans maxizyme, which has selective and effective
XX eradicating activity towards harmful cells by acquiring cleavage activity
XX of a specific target RNA by recognition of the other RNA molecule. The
XX enzyme of the invention is useful for cleaving target RNA and is useful
XX in treating diseases caused by the target RNA. This polynucleotide
XX sequence represents the heterodimeric maxizyme RNA substrate relating to
XX the maxizyme enzyme of the invention
XX
SQ Sequence 11 BP; 0 A; 7 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 2.6e+02;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CGGGCGGGCGGC 11
Db 11 CGGGCGGGCGGC 1

RESULT 417
ADL16098/c
ID ADL16098 standard; DNA; 11 BP.
XX
XX AC ADL16098;
XX
XX 06-MAY-2004 (first entry)
XX
DE Neisseria meningitidis lgtG "fixed" mutant gene disrupted polyC tract.
XX
KW Lipooligosaccharide immunotype; LOS immunotype; serogroup B;
KW phase variation; fixed immunotype; homopolymetric nucleotide tract;
KW vaccine; immunostimulant; meningococcal disease; Neisserial disease;

```

mutant; lgtG; disrupted polyC tract; fixed; constitutive expression; ds.
Neisseria meningitidis; strain 35E.
Synthetic.

Key Location/Qualifiers
mutation replace(2,C)
/*tag= a
/note= "This base is C in the wild-type lgtG gene"
mutation replace(5,C)
/*tag= b
/note= "This base is C in the wild-type lgtG gene"
mutation replace(8,C)
/*tag= c
/note= "This base is C in the wild-type lgtG gene"

WO2004015099-A2.
19-FEB-2004.
31-JUL-2003; 2003WO-EP008569.
02-AUG-2002; 2002GB-00018035.
02-AUG-2002; 2002GB-00018036.
02-AUG-2002; 2002GB-00018037.
02-AUG-2002; 2002GB-00018051.
30-AUG-2002; 2002GB-00020197.
30-AUG-2002; 2002GB-00020199.
01-NOV-2002; 2002GB-00025524.
01-NOV-2002; 2002GB-00025531.
24-DEC-2002; 2002GB-00030164.
24-DEC-2002; 2002GB-00030168.
24-DEC-2002; 2002GB-00030170.
05-MAR-2003; 2003GB-00005028.
(GLAX) GLAXOSMITHKLINE BIOLOGICALS SA.
(UYQU) UNIV QUEENSLAND.
PA PA
PI Bienans R, Denoel P, Feron C, Goraj K, Jennings MP, Poolman J;
PI Weynants V;
XX XX
DR WPI; 2004-180668/17.
XX XX
PS Example 3; Page 28; 42pp; English.
XX XX
CC The invention relates to a process for making a genetically engineered
CC Neisserial strain (preferably Neisseria meningitidis serogroup B) in
CC which the lipooligosaccharide (LOS) immunotype is fixed or locked. A
CC feature of the meningococcal LOS is the reversible, high frequency
CC switching of expression (phase variation) of terminal LOS structures,
CC which is an obstacle to the development of a cross-protective vaccine
CC based on the use of LOS as the antigen. The process of the invention
CC involves engineering a Neisserial strain such that the homopolymERIC
CC nucleotide tract of a phase variable LOS synthesis gene (specifically
CC lgtA or lgtG) is reduced in length (whilst maintaining the open reading
CC frame), resulting in gene expression which is less phase variable. The
CC method of the invention can be used to produce a Neisserial strain with a
CC fixed L2 or L3 immunotype, which can be used in the manufacture of
CC vaccines (particularly multivalent vaccines) against neisserial disease,
CC especially meningococcal disease. The present sequence represents the
CC disrupted polyC tract of the constitutively expressed Neisseria
CC meningitidis lgtG "fixed" mutant gene (ADL16103).
XX XX
SQ Sequence 11 BP; 0 A; 8 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 2.6e+02;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 5 GGGCGGCGATCG 15
Db 11 GGGCGGCGGCG 1

mutant; lgtG; disrupted polyC tract; fixed; constitutive expression; ds.
Neisseria meningitidis; strain 35E.
Synthetic.

Key Location/Qualifiers
mutation replace(2,C)
/*tag= a
/note= "This base is C in the wild-type lgtG gene"
mutation replace(5,C)
/*tag= b
/note= "This base is C in the wild-type lgtG gene"
mutation replace(8,C)
/*tag= c
/note= "This base is C in the wild-type lgtG gene"

WO2004015099-A2.
19-FEB-2004.
31-JUL-2003; 2003WO-EP008569.
02-AUG-2002; 2002GB-00018035.
02-AUG-2002; 2002GB-00018036.
02-AUG-2002; 2002GB-00018037.
02-AUG-2002; 2002GB-00018051.
30-AUG-2002; 2002GB-00020197.
30-AUG-2002; 2002GB-00020199.
01-NOV-2002; 2002GB-00025524.
01-NOV-2002; 2002GB-00025531.
24-DEC-2002; 2002GB-00030164.
24-DEC-2002; 2002GB-00030168.
24-DEC-2002; 2002GB-00030170.
05-MAR-2003; 2003GB-00005028.
(GLAX) GLAXOSMITHKLINE BIOLOGICALS SA.
(UYQU) UNIV QUEENSLAND.
PA PA
PI Bienans R, Denoel P, Feron C, Goraj K, Jennings MP, Poolman J;
PI Weynants V;
XX XX
DR WPI; 2004-180668/17.
XX XX
PS Example 3; Page 28; 42pp; English.
XX XX
CC The invention relates to a process for making a genetically engineered
CC Neisserial strain (preferably Neisseria meningitidis serogroup B) in
CC which the lipooligosaccharide (LOS) immunotype is fixed or locked. A
CC feature of the meningococcal LOS is the reversible, high frequency
CC switching of expression (phase variation) of terminal LOS structures,
CC which is an obstacle to the development of a cross-protective vaccine
CC based on the use of LOS as the antigen. The process of the invention
CC involves engineering a Neisserial strain such that the homopolymERIC
CC nucleotide tract of a phase variable LOS synthesis gene (specifically
CC lgtA or lgtG) is reduced in length (whilst maintaining the open reading
CC frame), resulting in gene expression which is less phase variable. The
CC method of the invention can be used to produce a Neisserial strain with a
CC fixed L2 or L3 immunotype, which can be used in the manufacture of
CC vaccines (particularly multivalent vaccines) against neisserial disease,
CC especially meningococcal disease. The present sequence represents the
CC disrupted polyC tract of the constitutively expressed Neisseria
CC meningitidis lgtG "fixed" mutant gene (ADL16103).
XX XX
SQ Sequence 11 BP; 0 A; 8 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 2.6e+02;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 5 GGGCGGCGATCG 15
Db 11 GGGCGGCGGCG 1

RESULT 418
ADQ35287/c
ID ADQ35287 standard; DNA; 11 BP.
XX XX
AC ADQ35287;
XX XX
DT 23-SEP-2004 (first entry)
XX XX
DE Human hair-bearing skin-associated DNA fragment SEQ ID NO 104.
XX XX
KW hair-bearing skin; human; serial analysis of gene expression; SAGE;
KW homeostasis; cosmetic; pharmaceutical; biochip; ds.
XX XX
OS Homo sapiens.
XX XX
DE10260931-A1.
XX XX
PD 08-JUL-2004.
XX XX
PF 20-DEC-2002; 2002DE-01060931.
XX XX
PR 20-DEC-2002; 2002DE-01060931.
XX XX
PA (HENK) HENKEL KGAA.
XX XX
PI Petersohn D, Schlotmann K, Gassenmeier T, Holtkoetter O;
PI Conradt M, Hofmann K;
XX XX
DR WPI; 2004-518857/50.
XX XX
PT In vitro identification of genes important for hair-bearing skin, useful
PT for assessing homeostasis and in screening for pharmaceutical or cosmetic
PT agents, based on differential expression analysis.
XX XX
PS Claim 6; SEQ ID NO 104; 250pp; German.
XX XX
CC This invention describes a novel in vitro method for identifying genes
CC that are significant for hair-bearing skin in humans. The method
CC comprises recovering, from hair-bearing skin, a first mixture of
CC genetically expressed (transcribed and optionally translated) factors
CC (i.e. proteins, mRNA or their fragments), recovering a second, similar
CC mixture from skin on which hair does not grow and subjecting both
CC mixtures to serial analysis of gene expression (SAGE) to identify those
CC genes for which expression is markedly different between the two types of
CC skin. The invention also describes in vitro methods for determining
CC homeostasis of human hair-bearing skin and for determining activity of
CC cosmetic and pharmaceutical agents for use against disorders or
CC disturbances of the homeostasis of human hair-bearing skin. A biochip and
CC a test kit comprising a solid support (flexible or rigid) with
CC immobilised probes are also described for determining homeostasis. The
CC hair-bearing skin is from the scalp and the other skin is from the face.
CC The method allows identification of as many as possible of the genes
CC important for hair-bearing skin, and therefore, of a very wide range of
CC potential therapeutic and cosmetic agents. ADQ35184-ADQ36518 represent
CC human DNA tag fragments used to identify genes associated with hair-
CC bearing skin.
XX XX
SQ Sequence 11 BP; 0 A; 7 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 48.8%; Score 7.8; DB 1; Length 11;
Best Local Similarity 81.8%; Pred. No. 2.6e+02;
Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2 GGGCGGCGGCA 12
Db 11 GGGGGGCGAGCA 1

RESULT 419
ADQ36384/c
ID ADQ36384 standard; DNA; 11 BP.
XX XX

```

AC ADQ36384;
XX
XX 23-SEP-2004 (first entry)
XX
XX Human hair-bearing skin-associated DNA fragment SEQ ID NO 1201.
XX
XX hair-bearing skin; human; serial analysis of gene expression; SAGE;
XX homeostasis; cosmetic; pharmaceutical; biochip; ds.
XX
XX Homo sapiens.
XX
XX DE10260931-A1.
XX
XX 08-JUL-2004.
XX
XX 20-DEC-2002; 2002DE-01060931.
XX
XX 20-DEC-2002; 2002DE-01060931.
XX
XX (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Schlotmann K, Gassenmeier T, Holtkoetter O;
XX Conradt M, Hofmann K;
XX WPI; 2004-518857/50.
XX
XX In vitro identification of genes important for hair-bearing skin, useful
XX for assessing homeostasis and in screening for pharmaceutical or cosmetic
XX agents, based on differential expression analysis.
XX
XX Claim 4; SEQ ID NO 1201; 250pp; German.
XX
XX This invention describes a novel in vitro method for identifying genes
XX that are significant for hair-bearing skin in humans. The method
XX comprises recovering, from hair-bearing skin, a first mixture of
XX genetically expressed (transcribed and optionally translated) factors
XX (i.e. proteins, mRNA or their fragments), recovering a second, similar
XX mixture from skin on which hair does not grow and subjecting both
XX mixtures to serial analysis of gene expression (SAGE) to identify those
XX genes for which expression is markedly different between the two types of
XX skin. The invention also describes in vitro methods for determining
XX homeostasis of human hair-bearing skin and for determining activity of
XX cosmetic and pharmaceutical agents for use against disorders or
XX disturbances of the homeostasis of human hair-bearing skin. A biochip and
XX a test kit comprising a solid support (flexible or rigid) with
XX immobilised probes are also described for determining homeostasis. The
XX hair-bearing skin is from the scalp and the other skin is from the face.
XX The method allows identification of as many as possible of the genes
XX important for hair-bearing skin, and therefore, of a very wide range of
XX potential therapeutic and cosmetic agents. ADQ35184-ADQ36518 represent
XX human DNA Tag fragments used to identify genes associated with hair-
XX bearing skin.
XX
XX Sequence 11 BP; 0 A; 7 C; 3 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 48.8%; Score 7.8; DB 1; Length 11;
XX Best Local Similarity 81.8%; Pred. No. 2.6e+02;
XX Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GCGCGGCGGCA 12
DB 11 GCGCGGCGGCA 1

RESULT 420
ADQ32529
ID ADQ32529 standard; DNA; 11 BP.
XX
XX ADQ32529;
XX
XX 23-SEP-2004 (first entry)
XX
XX Human facial skin-associated DNA fragment SEQ ID NO 619.

```

```

XX facial skin; human; serial analysis of gene expression; SAGE;
XX homeostasis; biochip; cosmetic; pharmaceutical; ds.
XX
XX Homo sapiens.
XX
XX DE10260928-A1.
XX
XX 08-JUL-2004.
XX
XX 20-DEC-2002; 2002DE-01060928.
XX
XX 20-DEC-2002; 2002DE-01060928.
XX
XX (HENK ) HENKEL KGAA.
XX
XX Petersohn D, Schlotmann K, Gassenmeier T, Holtkoetter O;
XX Conradt M, Hofmann K;
XX WPI; 2004-518855/50.
XX
XX In vitro identification of genes important for facial skin, useful for
XX assessing homeostasis and in screening for pharmaceutical or cosmetic
XX agents, based on differential expression analysis.
XX
XX Claim 6; SEQ ID NO 619; 577pp; German.
XX
XX This invention describes a novel in vitro method for identifying genes
XX that are significant for facial skin in humans. The method comprises
XX recovering, from facial skin, a first mixture of genetically expressed
XX (transcribed and optionally translated) factors (i.e. proteins, mRNA or
XX their fragments), recovering a second, similar mixture from some other
XX human tissue, preferably skin from a protected area, especially from the
XX breast and subjecting the mixtures to serial analysis of gene expression
XX (SAGE) to identify those genes for which expression is markedly different
XX between facial skin and the other tissue. The invention also describes an
XX in vitro method for determining homeostasis of human facial skin; a test
XX kit which comprises a solid support (flexible or rigid) on which are
XX immobilised probes that bind specifically to the factors of interest and
XX a biochip for determining homeostasis of human facial skin. The products
XX of the invention are also used in a method which determines activity of
XX cosmetic and pharmaceutical agents for use against disorders or
XX disturbances of the homeostasis of human skin and a screening method for
XX identifying cosmetic and pharmaceutical agents. The method allows
XX identification of as many as possible of the genes important for facial
XX skin and thus of a very wide range of potential therapeutic and cosmetic
XX agents. ADQ31911-ADQ35111 represent human DNA Tag fragments used to
XX identify the facial skin-associated genes described in the invention.
XX
XX Sequence 11 BP; 1 A; 3 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 48.8%; Score 7.8; DB 1; Length 11;
XX Best Local Similarity 81.8%; Pred. No. 2.6e+02;
XX Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GCGCGGCGGCA 12
DB 1 GCGCGGCGGCA 11

RESULT 421
ADQ224803/c
ID ADQ224803 standard; DNA; 11 BP.
XX
XX ADQ224803;
XX
XX 16-JUN-2005 (first entry)
XX
XX Human SNP detection related oligonucleotide #1770.
XX
XX ss; haplotype mapping; SNP detection; tumor; cytostatic; neoplasm;
XX immune disorder; cardiovascular disease; metabolic disorder;
XX respiratory disease; musculoskeletal disease; renal disease;

```

KW nephrotropic; endocrine disease; genitourinary disease.
 XX Homo sapiens.
 OS WO2005030952-A1.
 XX 07-APR-2005.
 XX 30-SEP-2004; 2004WO-JP014784.
 XX 30-SEP-2003; 2003JP-00342519.
 PR 28-MAY-2004; 2004JP-00158717.
 XX (RIKE) RIKEN KK.
 PA (STAG-) STAGEN CO LTD.
 PA (SEKI/) SEKINE A.
 PA (IIDA/) IIDA A.
 PA (SAIT/) SAITO S.
 XX Sekine A, Iida A, Saito S, Nakamura Y, Kamatani N;
 PI WPI; 2005-305936/31.
 XX Analyzing haplotype, by detecting polymorphism in drug-related genes,
 PT electing common polymorphism (CP), building haplotype block using CP,
 PT specifying CP within block, specifying tag polymorphism from CP within
 PT block.
 XX Disclosure; SEQ ID NO 1770; 1290bp; Japanese.
 XX The invention relates to a method of analyzing haplotype, by detecting
 CC gene polymorphism in drug-related genes such as aryl acetylarnide
 CC deacetylase, arylalkylamine N-acetyl transferase or ATP-binding cassette,
 CC sub-family A (ABCI), member 1. The method is useful for analyzing
 CC haplotype. The method is useful for estimating the sensitivity or disease
 CC of a medicine or a foreign material, for selecting medicine for
 CC preventing or treating diseases, for determining appropriate dosage of
 CC medicine for preventing or treating a disease, for analyzing a drug
 CC interaction, and for determining the related polymorphism relative to the
 CC sensitivity of the medicine, foreign material or disease. The diseases
 CC include malignant tumor, immune disorder circulatory disease, metabolic
 CC disease, kidney disease, respiratory disease and muscle associated
 CC disease. The method enables analysis of the individual differences
 CC related to the sensitivity of a medicine, using a haplotype, without
 CC using each single nucleotide polymorphism. The present sequence
 CC represents a human SNP detection related oligonucleotide.
 XX
 SQ Sequence 11 BP; 2 A; 5 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 48.8%; Score 7.8; DB 1; Length 11;
 Best Local Similarity 81.8%; Pred. No. 2.6e+02;
 Matches 9; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GCGGGCGGCAT 13
 |||||
 Db 11 GCGGGCGGCTAT 1
 RESULT 422
 AAV47215
 ID AAV47215 standard; DNA; 10 BP.
 XX
 AC AAV47215;
 XX
 DT 10-NOV-1998 (first entry)
 DE Antisense oligonucleotide 715, targeting adenosine A1 receptor.
 XX
 XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 XX

OS Homo sapiens.
 XX Key Location/Qualifiers
 FH modified_base 1..10
 FT /tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX WO9823294-A1.
 XX 04-JUN-1998.
 XX 26-NOV-1997; 97WO-US022017.
 XX 26-NOV-1996; 96US-00757024.
 XX (UYEC-) UNIV EAST CAROLINA.
 XX Nyce JW;
 XX WPI; 1998-322464/28.
 XX Treating respiratory disease with antisense sequences directed against
 PT adenosine or bradykinin receptors - with localised delivery to the
 PT respiratory system, suitable for long term treatment of asthma, adult
 PT respiratory distress syndrome etc.
 XX Claim 12; Page 8-24; 47pp; English.
 XX Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX Sequence 10 BP; 1 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 GCGGGCGG 10
 |||||
 Db 2 GCGGGCGG 10
 RESULT 423
 AAV47326
 ID AAV47326 standard; DNA; 10 BP.
 XX
 AC AAV47326;
 XX
 DT 10-NOV-1998 (first entry)
 DE Antisense oligonucleotide 826, targeting adenosine A1 receptor.
 XX
 XX Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX

```

FH Key      Location/Qualifiers
FT modified_base      1..10
FT FT          /*tag= a
FT FT          /note= "contains phosphorothioate internucleotide
FT FT          linkages"
XX
XX WO9823294-A1.
XX
XX PD          04-JUN-1998.
XX
XX PF          26-NOV-1997; 97WO-US022017.
XX
XX PR          26-NOV-1996; 96US-00757024.
XX
XX PA          (UYEC-) UNIV EAST CAROLINA.
XX
XX PI          Nyce JW;
XX
XX DR          WPI; 1998-322464/28.
XX
XX FT          Treating respiratory disease with antisense sequences directed against
XX FT          adenosine or bradykinin receptors - with localised delivery to the
XX FT          respiratory system, suitable for long term treatment of asthma, adult
XX FT          respiratory distress syndrome etc.
XX
XX PS          Claim 12; Page 8-24; 47pp; English.
XX
XX CC          Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
XX CC          human adenosine A1 receptor, the design of which required the secondary
XX CC          structure of this targets mRNA. The adenosine receptor mRNA secondary
XX CC          structure was both analysed and used to construct antisense
XX CC          oligonucleotides containing a phosphorothioate backbone. Once the
XX CC          antisense molecules are created they can be used to target their
XX CC          predetermined target, thus causing the gene product to decrease. The
XX CC          antisense oligonucleotides were targeted to specific mRNA regions
XX CC          containing either a junction between the intron and exon, or where they
XX CC          may overlap the initiation codon. The receptor is a member of the G-
XX CC          protein coupled family of cell surface receptors that have 7-
XX CC          transmembrane segments. These oligonucleotides can be used to treat or
XX CC          prevent conditions associated with bronchoconstriction and/or lung
XX CC          inflammation in humans or other animals e.g. asthma, pulmonary disease,
XX CC          allergy, emphysema and cystic fibrosis
XX
XX SQ          Sequence 10 BP; 1 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

      Query Match      46.3%; Score 7.4; DB 1; Length 10;
      Best Local Similarity 88.9%; Pred. No. 2.8e+02;
      Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      7 GCGGCATCG 15
Db      1 GCGGCATGG 9

RESULT 424
AAV50247
ID      AAV50247 standard; DNA; 10 BP.
XX
XX AC          AAV50247;
XX
XX DT          21-OCT-1998 (first entry)
XX
XX DE          Yeast tag for additional NORF chromosome 3 tag position 41645.
XX
XX KW          Yeast; Saccharomyces cerevisiae; transcriptome; cell cycle; regulation;
XX KW          eukaryotic cell; antifungal; SAGE tag; gene expression;
XX KW          serial analysis of gene expression; probe; ss.
XX
XX OS          Saccharomyces cerevisiae.
XX
XX SS          Synthetic.
XX
XX PN          WO982847-A2.

```

```

PD      30-JUL-1998.
XX
XX PF          22-JAN-1998; 98WO-US001216.
XX
XX PR          23-JAN-1997; 97US-0035917P.
XX
XX PA          (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
XX
XX PI          Velculescu VE, Vogelstein B, Kinzler KW;
XX
XX DR          WPI; 1998-427943/36.
XX
XX FT          Yeast transcriptome - useful for modulating eukaryotic cell, for
XX FT          screening antifungal agents, and for identifying genes in cell cycle
XX FT          progression.
XX
XX PS          Claim 1; Page 26; 44pp; English.
XX
XX CC          Yeast transcriptome is encoded by a DNA molecule comprising a yeast gene
XX CC          involved in cell cycle progression selected from the group of
XX CC          nonannotated ORF (NORF) genes. SAGE (serial analysis gene expression)
XX CC          tags for highly expressed genes and NORF genes are given in AAV50051 to
XX CC          AAV50345. The present invention describes: (1) a method of using yeast
XX CC          genes to modulate the cell cycle which comprises administering to a cell
XX CC          an isolated DNA molecule comprising a yeast gene which is involved in
XX CC          cell cycle progression selected from differentially expressed genes (SAGE
XX CC          tags given in AAV50051 to AAV50345); (2) a method for screening candidate
XX CC          antifungal drugs which comprises contacting a test substance with a yeast
XX CC          cell and monitoring expression of a yeast gene which is involved in cell
XX CC          cycle progression; (3) a method of identifying human genes which are
XX CC          involved in cell cycle progression which comprises hybridizing a probe
XX CC          comprising at least 10 contiguous nucleotides of a yeast gene which is
XX CC          differentially expressed between at least 2 phases selected from the log
XX CC          phase, the S phase and the G2/M phase; and (4) a probe for ascertaining
XX CC          the phase in the cell cycle, where the probe comprises at least 14
XX CC          contiguous nucleotides of a NORF gene (SAGE tags given in AAV50051 to
XX CC          AAV50345), or as an array of probes on a solid support
XX
XX SQ          Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

      Query Match      46.3%; Score 7.4; DB 1; Length 10;
      Best Local Similarity 88.9%; Pred. No. 2.8e+02;
      Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CGCGCGGCG 9
Db      2 CGCGCGGTG 10

RESULT 425
AAX77470
ID      AAX77470 standard; DNA; 10 BP.
XX
XX AC          AAX77470;
XX
XX DT          05-AUG-1999 (first entry)
XX
XX DE          US5912147 primer 14.
XX
XX KW          Primer; quantitation; genetic instability; tumour cell; detection;
XX KW          neoplastic transformation; carcinogenesis; ss.
XX
XX OS          Synthetic.
XX
XX PN          US5912147-A.
XX
XX PD          15-JUN-1999.
XX
XX PF          22-OCT-1996; 96US-00734973.
XX
XX PR          22-OCT-1996; 96US-00734973.
XX
XX PA          (HEAL-) HEALTH RES INC.

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XX Anderson G, Stoler D, Basik M;
PI WPI; 1999-357197/30.
XX Quantitating genetic instability.
XX Claim 4; Col 21-22; 27pp; English.
XX This invention describes a novel method for quantitating genetic
XX instability independent of microsatellite alterations by treating a
XX comparison pair comprising genomic DNA from tumour cells and genomic DNA
XX from normal cells. The method involves the cells from the same individual
XX with oligonucleotide primers selected from (i) a nucleotide sequence
XX (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
XX 7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
XX pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
XX a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
XX nucleotide sequence (CG)xY, where Y is a pyrimidine selected from
XX cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
XX (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
XX 16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
XX adenine and guanine and Y is a pyrimidine selected from cytosine,
XX thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
XX where R is a purine selected from adenine and guanine and x = 6-16,
XX (viii) a nucleotide sequence (CA)xY, where Y is a pyrimidine selected
XX from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
XX of the primers. The method is useful for detecting genomic instability
XX which are commonly associated with the various stages of neoplastic
XX transformation and carcinogenesis. The method is rapid and simple
XX
XX Sequence 10 BP; 0 A; 5 C; 5 G; 0 T; 0 U; 0 Other;
SQ
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3 GCGGGCGGC 11
Db 2 GCGGGCGGC 10
RESULT 426
AAV81843/C
ID AAV81843 standard; DNA; 10 BP.
XX
XX AAV81843;
XX
XX 11-MAR-1999 (first entry)
XX Human interleukin-1 forward primer OPE7.
XX
XX Human; cardiovascular disease; atherosclerosis; ischaemia; restenosis;
XX reperfusion; hypertension; arterial inflammation; diagnosis; rchd528;
XX primer; ss.
XX Synthetic.
XX Homo sapiens.
XX US5849578-A.
XX
XX 15-DEC-1998.
XX
XX 15-MAR-1996; 96US-00616844.
XX
XX 10-FEB-1995; 95US-00386844.
XX 07-JUN-1995; 95US-00458873.
XX 09-FEB-1996; 96US-00599654.
XX
XX (MILL-) MILLENNIUM PHARM INC.
XX Falb DA;
XX
XX
XX WPI; 1999-069743/06.
XX DNA encoding rchd528 polypeptide - associated with cardiovascular
XX disease.
XX Example; Col 99; 122pp; English.
XX The present invention describes rchd528 protein. A method has been
XX developed for producing the rchd528 gene product. The present invention
XX also describes methods and compositions for the treatment and diagnosis
XX of cardiovascular diseases, including: atherosclerosis; ischaemia;
XX restenosis; reperfusion; hypertension; and arterial inflammation. The
XX present sequence represents a primer used in an example from the present
XX invention
XX
XX Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
SQ
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 GCGGGCATC 14
Db 10 GGCTGCATC 2
RESULT 427
AAV53703
ID AAV53703 standard; DNA; 10 BP.
XX
XX AAV53703;
XX
XX 05-JUL-1999 (first entry)
XX Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
XX Antisense oligonucleotide; multiple target; antisense treatment;
XX impaired respiration; inflammation; lung disease;
XX pulmonary vasoconstriction; inflammation; allergic rhinitis;
XX acute asthma; allergy; asthma; pain; cystic fibrosis;
XX respiratory distress syndrome; pulmonary vasoconstriction; emphysema;
XX chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
XX colon cancer; breast cancer; lung cancer; pancreatic cancer;
XX hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX prostate cancer; ss.
XX Synthetic.
XX WO9913886-A1.
XX
XX 25-MAR-1999.
XX
XX 17-SEP-1998; 98WO-US019419.
XX
XX 17-SEP-1997; 97US-0059160P.
XX 09-JUN-1998; 98US-00093972.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW;
XX
XX WPI; 1999-229400/19.
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
XX vasoconstriction.
XX
XX Disclosure; Page 40; 120pp; English.
XX
XX The specification describes antisense oligonucleotides (AAV52869-XS5271)
XX directed against at least 2 mRNAs selected from target genes, coding and
XX non-coding regions of RNAs corresponding to target genes, gene initiation
XX codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'

```

CC -end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX
 SQ Sequence 10 BP; 1 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GCGGCATCG 15
 |||||
 Db 1 GCGGCATGG 9

RESULT 428

AAX53592
 ID AAX53592 standard; DNA; 10 BP.

XX
 AC AAX53592;

DT 05-JUL-1999 (first entry)

DE Human adenosine A1 receptor antisense oligonucleotide fragment.

XX Antisense oligonucleotide; multiple target; antisense treatment;
 KW impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.

XX Synthetic.

XX WO9913886-A1.

XX 25-MAR-1999.

XX 17-SEP-1998; 98WO-US019419.

XX 17-SEP-1997; 97US-0059160P.

PR 09-JUN-1998; 98US-00093972.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 1999-229400/19.

XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.

XX Disclosure; Page 38; 120pp; English.

XX The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and

CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX55272-74. These multiple target oligonucleotides
 CC (specifically AAX55180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer, as
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer
 XX

SQ Sequence 10 BP; 1 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGCGCGG 10
 |||||

Db 2 GCGGCGCGG 10
 |||||

RESULT 429

AAX26257/c
 ID AAX26257 standard; DNA; 10 BP.

XX
 AC AAX26257;

DT 24-MAY-1999 (first entry)

XX Forward primer OPE7.

XX Fingerprinting gene; rchd502; transmembrane protein; cardiovascular;
 KW fingerprint/target gene; up-regulated; endothelial cell; shear-stress;
 KW atherosclerosis; ischemia; reperfusion; hypertension; restenosis; human;
 KW PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX US5882925-A.

XX 16-MAR-1999.

XX 09-FEB-1996; 96US-00599654.

XX 10-FEB-1995; 95US-00386844.

PR 07-JUN-1995; 95US-00485573.

XX (MILL-) MILLENNIUM PHARM INC.

XX Falb DA;

XX WPI; 1999-214071/18.

XX New polynucleotides consisting of residues 1-1929 of the rchd502 gene -
 PT are differentially expressed in cardiovascular disease states, and can
 PT therefore be used to treat and diagnose cardiovascular diseases.

XX Disclosure; Col 9; 121pp; English.

XX The invention relates to a rchd502 target/fingerprint gene encoding a
 CC transmembrane protein. The invention provides cDNAs contained in plasmids
 CC pFCHD502SF (ATCC 69981) and pFCHD502SJ (ATCC 69982) that encode the
 CC rchd502 polypeptide, and are differentially expressed in cardiovascular

CC disease states. Cultured genetically engineered host cell containing the
 CC rchd502 polynucleotides in operative association with a nucleotide
 CC regulatory element are used for producing a polypeptide rchd502 gene
 CC product. Identifying that the fingerprint/target gene rchd502 is
 CC differentially expressed (up-regulated) by endothelial cells subjected to
 CC shear-stress, provides a tool for the diagnosis and treatment of
 CC cardiovascular disease e.g. atherosclerosis, ischemia/reperfusion,
 CC hypertension, restenosis. The fingerprint gene is useful for testing the
 CC efficacy of candidate drugs in basic research and in clinical trials and
 CC or imaging of a diseased cardiovascular tissue. The gene may also be used
 CC in screening for ligands of target gene product receptor domains, as well
 CC as antagonists of the ligand-receptor interaction
 XX
 XX Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 GCGGGCAGC 14
 Db 10 GGCTGCATC 2

RESULT 430
 AAZ38077
 ID AAZ38077 standard; DNA; 10 BP.

AC AAZ38077;

XX 22-FEB-2000 (first entry)

XX Human FKHL7 DNA fragment.

XX Forkhead transcription factor gene; FKHL7; treatment; glaucoma; human;
 KW transgenic animal; drug screening; ss.

XX Homo sapiens.

XX WO9953060-A2.

XX 21-OCT-1999.

XX 14-APR-1999; 99WO-US008148.

XX 15-APR-1998; 98US-0081870P.

XX 22-MAY-1998; 98US-00083352.

XX (IOWA) UNIV IOWA RES FOUND.

XX Sheffield VC, Alward WLM, Stone EM, Nishimura D, Patil S;

XX WPI; 1999-620429/53.

XX New isolated human forkhead transcription factor gene, FKHL7, used to,
 PT e.g. develop products for the diagnosis.

XX Disclosure; Page 58; 99pp; English.

XX The invention provides a human forkhead transcription factor gene, FKHL7.
 CC The FKHL7 protein can be produced by standard recombinant methodology.
 CC The products can be used for diagnosis, prognosis, monitoring, prevention
 CC and treatment of glaucoma. They can also be used for the production of
 CC transgenic animals and drug screening. Sequences AAZ38076-78 represent
 CC fragments of the FKHL7 gene, which when deleted or when mutations occur
 CC in this region, may cause or contribute to the development of glaucoma
 XX

SQ Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 GCGGGCGGC 11
 Db 2 GCGGGCGGC 10

RESULT 431

AAZ33146

ID AAZ33146 standard; DNA; 10 BP.

XX AAZ33146;

XX 28-JUL-2000 (first entry)

XX Low adenosine antisense oligonucleotide SEQ ID NO:835.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

XX WO200009525-A2.

XX 24-FEB-2000.

XX 03-AUG-1999; 99WO-US017712.

XX 03-AUG-1998; 98US-0095212P.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 2000-205971/18.

XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.

XX Claim 18; Page 370; 1343pp; English.

XX The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing the
 CC bronchoconstriction and inflammation. AA332313 to AA335312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AA332323 to
 CC AA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing


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XX Roberts BL, Shankara S;
PI WPI; 2000-106077/09.
XX
DR
XX
XX
XX Isolated polynucleotides differentially expressed in antigen-presenting
PT cells, useful in gene vaccines against cancer.
PT
XX
XX Claim 1; Page 71; 130pp; English.
XX
XX Sequences AAZ77573-279709 represent SAGE (serial analysis of gene
CC expression) tags used to identify mRNA transcripts encoding
CC immunostimulatory cofactor proteins which are preferentially or
CC differentially expressed in monocyte-derived dendritic cells compared
CC with monocytes. Some of the transcripts correspond to known genes or ESTs
CC (expressed sequence tags) which were previously unknown to be
CC preferentially or differentially expressed in dendritic cells, while
CC other transcripts correspond to novel genes. Antigen-presenting cell
CC (APC)-associated costimulatory factors play an important role in the
CC activation of the cytotoxic immune response, particularly against tumour
CC cells. Tumour antigen presentation via the MHC (major histocompatibility
CC complex) and subsequent recognition by T-cell receptors is alone
CC insufficient to activate a robust cytotoxic immune response that can lyse
CC the tumour cells, immunostimulatory cofactors also being required for
CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid
CC sequences identified using the SAGE tags have several potential uses.
CC They may be used in vaccines to induce an immune response, particularly
CC against a tumour antigen; to modulate the genotype of an APC; to screen
CC for agents that modulate expression of differentially expressed genes in
CC an APC; and as hybridisation probes/amplification primers for the
CC diagnosis, prognosis and monitoring of diseases related to abnormal
CC expression of these genes. Detection of the dendritic cell differentially
CC expressed genes, or of their encoded proteins, can be used to identify
CC cells as belonging to the monocyte lineage. Cells containing these genes
CC can be used in active immunotherapy (or to stimulate production of a
CC population of antigen-specific effector cells) and vectors containing
CC them are used in gene therapy. Co-administration of tumour antigens and
CC APC-associated costimulatory factors ensures adequate antigen
CC presentation to endogenous APCs and upregulates the APCs for the
CC presentation of co-stimulatory signals, migration to T cell-rich sites,
CC secretion of T cell growth factors and secretion of chemokines for
CC recruitment of immune effector cells
XX
SQ Sequence 10 BP; 1 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

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Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGGCG 9
DB 2 CGACGGGCG 10

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RESULT 434
AAZ78048/C
ID AAZ78048 standard; DNA; 10 BP.
AC
XX AAZ78048;
XX
XX 10-APR-2000 (first entry)
XX
DE Human dendritic cell SAGE tag, SEQ ID NO:476.
XX
XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;
KW APC; monocyte-derived dendritic cell; differential gene expression;
KW immunostimulatory cofactor; costimulatory factor; CTL;
KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.
XX
OS Homo sapiens.
XX
PN W09965924-A2.
XX

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PD 23-DEC-1999.
XX
XX 18-JUN-1999; 99WO-US013800.
XX
XX 19-JUN-1998; 98US-0089833P.
PR 19-JUN-1998; 98US-0089844P.
PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089878P.
PR 19-JUN-1998; 98US-0089991P.
PR 19-JUN-1998; 98US-0089992P.
PR 19-JUN-1998; 98US-0089993P.
PR 19-JUN-1998; 98US-0089994P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0089999P.
PR 19-JUN-1998; 98US-0090000P.
PR 19-JUN-1998; 98US-0090003P.
PR 19-JUN-1998; 98US-0090036P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
PR 19-JUN-1998; 98US-0090042P.
PR 19-JUN-1998; 98US-0090043P.
PR 19-JUN-1998; 98US-0090044P.
PR 19-JUN-1998; 98US-0090045P.
PR 19-JUN-1998; 98US-0090047P.
PR 19-JUN-1998; 98US-0090048P.
PR 19-JUN-1998; 98US-0090072P.
PR 19-JUN-1998; 98US-0090076P.
PR 19-JUN-1998; 98US-0090077P.
PR 19-JUN-1998; 98US-0090078P.
PR 19-JUN-1998; 98US-0090079P.
PR 19-JUN-1998; 98US-0090080P.
PR 08-DEC-1998; 98US-0111715P.
XX
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
XX WPI; 2000-106077/09.
XX
XX Isolated polynucleotides differentially expressed in antigen-presenting
PT cells, useful in gene vaccines against cancer.
PT
XX Claim 1; Page 78; 130pp; English.
XX
XX Sequences AAZ77573-279709 represent SAGE (serial analysis of gene
CC expression) tags used to identify mRNA transcripts encoding
CC immunostimulatory cofactor proteins which are preferentially or
CC differentially expressed in monocyte-derived dendritic cells compared
CC with monocytes. Some of the transcripts correspond to known genes or ESTs
CC (expressed sequence tags) which were previously unknown to be
CC preferentially or differentially expressed in dendritic cells, while
CC other transcripts correspond to novel genes. Antigen-presenting cell
CC (APC)-associated costimulatory factors play an important role in the
CC activation of the cytotoxic immune response, particularly against tumour
CC cells. Tumour antigen presentation via the MHC (major histocompatibility
CC complex) and subsequent recognition by T-cell receptors is alone
CC insufficient to activate a robust cytotoxic immune response that can lyse
CC the tumour cells, immunostimulatory cofactors also being required for
CC efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid
CC sequences identified using the SAGE tags have several potential uses.
CC They may be used in vaccines to induce an immune response, particularly
CC against a tumour antigen; to modulate the genotype of an APC; to screen
CC for agents that modulate expression of differentially expressed genes in
CC an APC; and as hybridisation probes/amplification primers for the
CC diagnosis, prognosis and monitoring of diseases related to abnormal
CC expression of these genes. Detection of the dendritic cell differentially
CC expressed genes, or of their encoded proteins, can be used to identify
CC cells as belonging to the monocyte lineage. Cells containing these genes
CC can be used in active immunotherapy (or to stimulate production of a
CC population of antigen-specific effector cells) and vectors containing

```

CC them are used in gene therapy. Co-administration of tumour antigens and
 CC APC-associated costimulatory factors ensures adequate antigen
 CC presentation to endogenous APCs and upregulates the APCs for the
 CC presentation of co-stimulatory signals, migration to T cell-rich sites,
 CC secretion of T cell growth factors and secretion of chemokines for
 CC recruitment of immune effector cells
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 8 CGGCATCGT 16
 Db 10 CGGCCTCGT 2
 RESULT 435
 AAZ77777/c
 ID AAZ77777 standard; DNA; 10 BP.
 XX
 AC AAZ77777;
 DT 10-APR-2000 (first entry)
 XX
 DE Human dendritic cell SAGE tag, SEQ ID NO:205.
 XX
 KW SAGE tag; serial analysis of gene expression; antigen-presenting cell;
 KW APC; monocyte-derived dendritic cell; differential gene expression;
 KW immunostimulatory cofactor; costimulatory factor; CTL;
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9965924-A2.
 XX
 PD 23-DEC-1999.
 XX
 PF 18-JUN-1999; 99WO-US013800.
 XX
 PR 19-JUN-1998; 98US-0089833P.
 PR 19-JUN-1998; 98US-0089844P.
 PR 19-JUN-1998; 98US-0089853P.
 PR 19-JUN-1998; 98US-0089878P.
 PR 19-JUN-1998; 98US-0089919P.
 PR 19-JUN-1998; 98US-0089922P.
 PR 19-JUN-1998; 98US-0089933P.
 PR 19-JUN-1998; 98US-0089944P.
 PR 19-JUN-1998; 98US-0089972P.
 PR 19-JUN-1998; 98US-0089999P.
 PR 19-JUN-1998; 98US-0090000P.
 PR 19-JUN-1998; 98US-0090035P.
 PR 19-JUN-1998; 98US-0090036P.
 PR 19-JUN-1998; 98US-0090039P.
 PR 19-JUN-1998; 98US-0090041P.
 PR 19-JUN-1998; 98US-0090042P.
 PR 19-JUN-1998; 98US-0090043P.
 PR 19-JUN-1998; 98US-0090044P.
 PR 19-JUN-1998; 98US-0090045P.
 PR 19-JUN-1998; 98US-0090047P.
 PR 19-JUN-1998; 98US-0090048P.
 PR 19-JUN-1998; 98US-0090072P.
 PR 19-JUN-1998; 98US-0090076P.
 PR 19-JUN-1998; 98US-0090077P.
 PR 19-JUN-1998; 98US-0090078P.
 PR 19-JUN-1998; 98US-0090079P.
 PR 19-JUN-1998; 98US-0090080P.
 PR 08-DEC-1998; 98US-0111715P.
 XX
 (GENZ) GENZYME CORP.
 PA (ROBE/) ROBERTS B L.

(SHAN/) SHANKARA S.
 Roberts BL, Shankara S;
 WPI; 2000-106077/09.
 XX
 Isolated polynucleotides differentially expressed in antigen-presenting
 cells, useful in gene vaccines against cancer.
 PT
 PT
 XX
 Claim 1; Page 69; 130pp; English.
 XX
 Sequences AAZ77573-279709 represent SAGE (serial analysis of gene
 expression) tags used to identify mRNA transcripts encoding
 immunostimulatory cofactor proteins which are preferentially or
 differentially expressed in monocyte-derived dendritic cells compared
 with monocytes. Some of the transcripts correspond to known genes or ESTs
 (expressed sequence tags) which were previously unknown to be
 preferentially or differentially expressed in dendritic cells, while
 other transcripts correspond to novel genes. Antigen-presenting cell
 (APC)-associated costimulatory factors play an important role in the
 activation of the cytotoxic immune response, particularly against tumour
 cells. Tumour antigen presentation via the MHC (major histocompatibility
 complex) and subsequent recognition by T-cell receptors is alone
 insufficient to activate a robust cytotoxic immune response that can lyse
 the tumour cells, immunostimulatory cofactors also being required for
 efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid
 sequences identified using the SAGE tags have several potential uses.
 They may be used in vaccines to induce an immune response, particularly
 against a tumour antigen; to modulate the genotype of an APC; to screen
 for agents that modulate expression of differentially expressed genes in
 an APC; and as hybridisation probes/amplification primers for the
 diagnosis, prognosis and monitoring of diseases related to abnormal
 expression of these genes. Detection of the dendritic cell differentially
 expressed genes, or of their encoded proteins, can be used to identify
 cells as belonging to the monocyte lineage. Cells containing these genes
 can be used in active immunotherapy (or to stimulate production of a
 population of antigen-specific effector cells) and vectors containing
 them are used in gene therapy. Co-administration of tumour antigens and
 APC-associated costimulatory factors ensures adequate antigen
 presentation to endogenous APCs and upregulates the APCs for the
 presentation of co-stimulatory signals, migration to T cell-rich sites,
 secretion of T cell growth factors and secretion of chemokines for
 recruitment of immune effector cells
 XX
 SQ Sequence 10 BP; 0 A; 5 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGGCGGGCG 9
 Db 9 CGACGGGCG 1
 RESULT 436
 AAA88594/c
 ID AAA88594 standard; DNA; 10 BP.
 XX
 AC AAA88594;
 XX
 DT 05-FEB-2001 (first entry)
 XX
 DE Forward primer OPE7 used in differential display.
 XX
 KW Human; rchd005 gene; differential expression; HUVEC; endothelial cell;
 KW cardiovascular disease; diagnosis; therapy; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6124433-A.
 XX
 PD 26-SEP-2000.

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XX 06-OCT-1997; 97US-00944496.
XX
XX 10-FEB-1995; 95US-00386844.
PR
PR 07-JUN-1995; 95US-00485573.
PR
PR 09-FEB-1996; 96US-00599654.
XX
XX (BGHM ) BRIGHAM & WOMENS HOSPITAL.
PA
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Gimbrone MA, Falb DA;
PI
XX WPI; 2000-611017/58.
XX
XX Novel isolated rchd502 polypeptides, differentially expressed in response
PT to endothelial cell shear stress, used for diagnosis, monitoring clinical
PT trails, and treating cardiovascular diseases such as ischemia.
XX
XX Example 8.2; Col 9; 123pp; English.
XX
XX This oligonucleotide was used as forward primer, with the reverse primer
CC given in AAA8595, in a differential display analysis of interleukin-1
CC activated HUVEC. mRNA prepared from control HUVEC and from HUVEC treated
CC for 1 or 6 hr with 10 U/ml IL-1 was subjected to analysis. The novel
CC human gene rchd005 (see AAA8580) was identified, which is up-regulated
CC in IL-1 activated HUVEC. rchd005 is 1 of 8 novel human genes of the
CC invention (see AAA8576-83) characterised as being differentially
CC expressed in cardiovascular disease states, and which are of diagnostic
CC or therapeutic use
XX
XX Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
SQ
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 GGCGGCATC 14
Db 10 GGCTGCATC 2
||| |||||
RESULT 437
AAZ80951/c
ID AAZ80951 standard; DNA; 10 BP.
XX
XX AAZ80951;
AC
XX 07-APR-2000 (first entry)
DT
XX Metastatic breast tumour cell upregulated transcript tag #185.
DE
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
OS
XX WO9965928-A2.
PN
XX 23-DEC-1999.
PD
XX 18-JUN-1999; 99WO-US013647.
PF
XX 19-JUN-1998; 98US-0089853P.
PR
PR 19-JUN-1998; 98US-0089997P.
PR
PR 19-JUN-1998; 98US-0090039P.
PR
PR 19-JUN-1998; 98US-0090040P.
PR
PR 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX

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PI Roberts BL, Shankara S;
XX
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
XX Claim 1; Page 63; 219pp; English.
PS
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC vaccines; for diagnosing breast cancer and for raising specific
CC antibodies (Ab) Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 6 GGCGGCATC 14
Db 10 GGCTGCATC 2
||| |||||
RESULT 438
AAZ82378/c
ID AAZ82378 standard; DNA; 10 BP.
XX
XX AAZ82378;
AC
XX 07-APR-2000 (first entry)
DT
XX Metastatic breast tumour cell upregulated transcript tag #1612.
DE
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
OS
XX WO9965928-A2.
PN
XX 23-DEC-1999.
PD
XX 18-JUN-1999; 99WO-US013647.
PF
XX 19-JUN-1998; 98US-0089853P.
PR
PR 19-JUN-1998; 98US-0089997P.
PR
PR 19-JUN-1998; 98US-0090039P.
PR
PR 19-JUN-1998; 98US-0090040P.
PR
PR 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (ROBE/) ROBERTS B L.

```

```

PA (SHAN/) SHANKARA S.
XX Roberts BL, Shankara S;
PI WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX Claim 1; Page 101; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
SQ Sequence 10 BP; 0 A; 6 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. NO. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGG 10
Db 9 GCGCGGCGAG 1

RESULT 439
AAZ83954
ID AAZ83954 standard; DNA; 10 BP.
XX
XX AAZ83954;
XX
XX 07-APR-2000 (first entry)
XX
XX Metastatic breast tumour cell downregulated transcript tag #3188.
XX
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9965928-A2.
XX
XX 23-DEC-1999.
XX
XX 18-JUN-1999; 99WO-US013647.
XX
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-008997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX

PA (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
PI WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX Claim 1; Page 144; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
SQ Sequence 10 BP; 1 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. NO. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGCGGCGG 9
Db 2 CGCGCGGCGG 10

RESULT 440
AAZ85562/c
ID AAZ85562 standard; DNA; 10 BP.
XX
XX AAZ85562;
XX
XX 07-APR-2000 (first entry)
XX
XX Metastatic breast tumour cell downregulated transcript tag #4796.
XX
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9965928-A2.
XX
XX 23-DEC-1999.
XX
XX 18-JUN-1999; 99WO-US013647.
XX
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-008997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX

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PR 19-JUN-1998; 98US-0090041P.
XX
PA (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX
PI Roberts BL, Shankara S;
XX WPI; 2000-106079/09.
DR
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
PS Claim 1; Page 187; 219pp; English.
CC
CC AA280767 to AA283941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AA283942
CC to AA286677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
SQ Sequence 10 BP; 0 A; 5 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 9
Db 10 CGCGGGCGG 2
|||||
|

RESULT 441
AAZ86321/c
ID AAZ86321 standard; DNA; 10 BP.
AC
XX AAZ86321;
XX
DT 07-APR-2000 (first entry)
XX
DE Metastatic breast tumour cell downregulated transcript tag #5555.
XX
DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX OS
XX WO9965928-A2.
XX PN
XX 23-DEC-1999.
XX PD
XX 18-JUN-1999; 99WO-US013647.
XX PF
XX 19-JUN-1998; 98US-0089853P.
XX PR
XX 19-JUN-1998; 98US-008997P.
XX

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PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
PI Roberts BL, Shankara S;
XX WPI; 2000-106079/09.
DR
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
PS Claim 1; Page 205; 219pp; English.
CC
CC AA280767 to AA283941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AA283942
CC to AA286677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
SQ Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGG 10
Db 9 GCGGGCGG 1
|||||
|

RESULT 442
AAZ83218/c
ID AAZ83218 standard; DNA; 10 BP.
XX
XX AAZ83218;
XX
DT 07-APR-2000 (first entry)
XX
DE Metastatic breast tumour cell upregulated transcript tag #2452.
XX
DE Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX OS
XX WO9965928-A2.
XX PN
XX 23-DEC-1999.
XX PD
XX 18-JUN-1999; 99WO-US013647.
XX PF
XX

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PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
XX
PA (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
PI Roberts BL, Shankara S;
XX
DR WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
PS Claim 1; Page 125; 219pp; English.
XX
CC AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
SQ Sequence 10 BP; 1 A; 5 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGC 11
Db ||||| ||
9 GCGGGCTGC 1

RESULT 443
AAZ82321
ID AAZ82321 standard; DNA; 10 BP.
XX
AC AAZ82321;
XX
XX 07-APR-2000 (first entry)
XX
XX Metastatic breast tumour cell upregulated transcript tag #1555.
DE
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; tag; primer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9965928-A2.
XX
XX 23-DEC-1999.
XX

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PF 18-JUN-1999; 99WO-US013647.
XX
PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089997P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
XX
PA (GENZ ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
PI Roberts BL, Shankara S;
XX
DR WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
PT treatment of cancer.
XX
PS Claim 1; Page 100; 219pp; English.
XX
CC AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
CC that are preferentially transcribed in the metastatic breast tumour
CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
CC to AAZ86677 represent tags corresponding to distinct transcripts that are
CC preferentially transcribed in the primary or non-metastatic breast tumour
CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
CC transcripts can be used for diagnosis, prognosis, monitoring and
CC treatment of breast cancer, particularly where metastatic. Diagnosis is
CC by standard immunoassays or hybridisation/amplification reactions.
CC Compounds that modulate expression of the transcripts are potentially
CC useful for treatment of (metastatic) breast cancer, while promoters from
CC the transcripts are used to direct expression, in selected cell types, of
CC e.g. therapeutic genes (also ribozymes or antisense sequences),
CC particularly an antigen-encoding sequence for use in gene or cell-based
CC vaccines. Polypeptides encoded by the transcripts are also useful in
CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
CC agents. Host cells that produce the polypeptides can be used to expand
CC and isolate populations of educated, antigen-specific immune effector
CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
CC immunotherapy
XX
SQ Sequence 10 BP; 3 A; 2 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCATC 14
Db ||||| ||
1 GGAGGCATC 9

RESULT 444
AAZ85534/C
ID AAZ85534 standard; DNA; 10 BP.
XX
AC AAZ85534;
XX
XX 07-APR-2000 (first entry)
XX
XX Metastatic breast tumour cell downregulated transcript tag #4768.
DE
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
KW non-metastatic breast tumour tissue; gene therapy; anticancer;
KW antimetastatic; vaccine; diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9965928-A2.
XX

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PD 23-DEC-1999.
XX
XX
XX 18-JUN-1999; 99WO-US013647.
XX
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-0089997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
XX
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX
XX Claim 1; Page 186; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX particularly an antigen-encoding sequence for use in gene or cell-based
XX vaccines. Polypeptides encoded by the transcripts are also useful in
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
XX Sequence 10 BP; 0 A; 5 C; 4 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1 CGCGCGGCGC 9
XX |||||
XX Db 10 CGCGAGCGC 2
XX
XX RESULT 445
XX AAZ80826
XX ID AAZ80826 standard; DNA; 10 BP.
XX
XX AC AAZ80826;
XX
XX XX 07-APR-2000 (first entry)
XX
XX DE Metastatic breast tumour cell upregulated transcript tag #60.
XX
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX antimetastatic; vaccine; diagnosis; ss.
XX
XX OS Homo sapiens.
XX

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PN WO9965928-AA2.
XX
XX PD 23-DEC-1999.
XX
XX 18-JUN-1999; 99WO-US013647.
XX
XX 19-JUN-1998; 98US-0089853P.
XX 19-JUN-1998; 98US-0089997P.
XX 19-JUN-1998; 98US-0090039P.
XX 19-JUN-1998; 98US-0090040P.
XX 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
XX (ROBE/) ROBERTS B L.
XX (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
XX
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX
XX Claim 1; Page 59; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX particularly an antigen-encoding sequence for use in gene or cell-based
XX vaccines. Polypeptides encoded by the transcripts are also useful in
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
XX Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2 GCGCGGCGC 10
XX |||||
XX Db 1 GCGAGCGC 9
XX
XX RESULT 446
XX AAZ81263
XX ID AAZ81263 standard; DNA; 10 BP.
XX
XX AC AAZ81263;
XX
XX XX 07-APR-2000 (first entry)
XX
XX DE Metastatic breast tumour cell upregulated transcript tag #497.
XX
XX Human; metastatic breast tumour tissue; breast cancer; tag; primer;
XX non-metastatic breast tumour tissue; gene therapy; anticancer;
XX antimetastatic; vaccine; diagnosis; ss.
XX
XX

```



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OS Homo sapiens.
XX
XX WO9965928-A2.
XX
XX 23-DEC-1999.
XX
XX 18-JUN-1999; 99WO-US013647.
XX
XX 19-JUN-1998; 98US-0089853P.
XX
XX 19-JUN-1998; 98US-0089997P.
XX
XX 19-JUN-1998; 98US-0090039P.
XX
XX 19-JUN-1998; 98US-0090040P.
XX
XX 19-JUN-1998; 98US-0090041P.
XX
XX (GENZ ) GENZYME CORP.
XX
XX (ROBE/) ROBERTS B L.
XX
XX (SHAN/) SHANKARA S.
XX
XX Roberts BL, Shankara S;
XX
XX WPI; 2000-106079/09.
XX
XX Isolated polynucleotides differentially expressed between metastatic and
XX non-metastatic breast cancer cells, useful for diagnosis, prevention and
XX treatment of cancer.
XX
XX Claim 1; Page 71; 219pp; English.
XX
XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
XX that are preferentially transcribed in the metastatic breast tumour
XX tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
XX to AAZ86677 represent tags corresponding to distinct transcripts that are
XX preferentially transcribed in the primary or non-metastatic breast tumour
XX tissue (i.e. are downregulated in metastatic breast tumour cells). These
XX transcripts can be used for diagnosis, prognosis, monitoring and
XX treatment of breast cancer, particularly where metastatic. Diagnosis is
XX by standard immunoassays or hybridisation/amplification reactions.
XX Compounds that modulate expression of the transcripts are potentially
XX useful for treatment of (metastatic) breast cancer, while promoters from
XX the transcripts are used to direct expression, in selected cell types, of
XX e.g. therapeutic genes (also ribozymes or antisense sequences),
XX particularly an antigen-encoding sequence for use in gene or cell-based
XX vaccines. Polypeptides encoded by the transcripts are also useful in
XX CC vaccines; for diagnosing breast cancer and for raising specific
XX antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
XX agents. Host cells that produce the polypeptides can be used to expand
XX and isolate populations of educated, antigen-specific immune effector
XX cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
XX immunotherapy
XX
XX Sequence 10 BP; 0 A; 4 C; 5 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1 CGCGCGGCG 9
XX ||| |||||
XX 2 CGCCGGGCG 10
XX
XX RESULT 447
XX AAC73991/c
XX ID AAC73991 standard; cDNA; 10 BP.
XX
XX AAC73991;
XX
XX 02-FEB-2001 (first entry)
XX
XX Human dendritic cell cDNA base sequence oligonucleotide #78.
XX
XX Human; dendritic cell; monocyte; immune system; diagnosis; cancer;
XX autoimmune disease; tumour; ss.

```

```

XX Homo sapiens.
XX
XX WO200060074-A1.
XX
XX 12-OCT-2000.
XX
XX 30-MAR-2000; 2000WO-JP002019.
XX
XX 01-APR-1999; 99JP-00095481.
XX
XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.
XX
XX Hashimoto S, Matsushima K, Suzuki T;
XX WPI; 2000-619172/59.
XX
XX Groups of genes expressed in human dendritic cells at a greater or lesser
XX extent than in monocytes for investigation and diagnosis of autoimmune
XX disease and tumors.
XX
XX Claim 1; Page 10; 95pp; Japanese.
XX
XX The present invention describes a group of genes consisting of 100 genes
XX which are highly expressed in human dendritic cells; a group of genes
XX which are expressed at a higher frequency in human dendritic cells than
XX in human monocytes; and a group of genes which are expressed at lower
XX frequency in human dendritic cells than in human monocytes. Each group of
XX genes are characterised in that cDNAs of these genes respectively have
XX the base sequences of SEQ ID NO:1 to 100 (AAC73914 to AAC74013), SEQ ID
XX NO:101 to 200 (AAC74014 to AAC74113) and SEQ ID NO:201 to 300 (AAC74114
XX to AAC74213), each is continuous with the base sequence 5'-CATG-3'.
XX CC located most closely to the poly-A region. The sequences can be used for
XX the investigation of the role and mechanism of the involvement of
XX dendritic cells in the immune system and for the study and diagnosis of
XX diseases in which dendritic cells play a significant role, e.g. cancers
XX and autoimmune diseases
XX
XX Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3 GCGGGCGGC 11
XX ||| |||||
XX 10 GCCGGGCGC 2
XX
XX Db
XX
XX RESULT 448
XX AAA56254/c
XX ID AAA56254 standard; DNA; 10 BP.
XX
XX AAA56254;
XX
XX 07-SEP-2000 (first entry)
XX
XX Human macrophage gene Tag oligonucleotide sequence SEQ ID NO:148.
XX
XX Human; monocyte; macrophage; GM-macrophage; M-macrophage; tag;
XX granulocyte-macrophage colony-stimulating factor; characterisation;
XX GM-CSF; identification; diagnosis; gene specificity; oncogenesis;
XX disease onset mechanism; genetic disease; drug development; ss.
XX
XX Homo sapiens.
XX
XX WO200024892-A1.
XX
XX 04-MAY-2000.
XX
XX 28-OCT-1999; 99WO-JP005982.
XX
XX 28-OCT-1998; 98JP-00307532.

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XX Claim 17; Page 34; 252pp; English.

PS The present invention describes a pharmaceutical composition, comprising

XX at least one agent (I) that prevents, alleviates and/or inhibits

CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.

CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide

CC (Ib), containing less than 15% adenosine (A), that is antisense to target

CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'

CC ends or segments between coding and non-coding sequences), or to all

CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and

CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at

CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)

CC and (Ib), and optionally also contains one or more surfactants. The

CC compositions are used to prevent, alleviate and/or treat adenosine

CC receptor-mediated cardiac, lung and/or renal damage or failure

CC (particularly where associated with ischaemia, toxin release and/or

CC administration of drugs or imaging agents, e.g. adenosine for treating

CC supraventricular tachycardia); (adult) respiratory distress syndrome

CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive

CC pulmonary disease; cardiopulmonary hypoxia associated with administration

CC of stress-test agents, particularly where such conditions are associated

CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to

CC AAA03715 represent specifically claimed phosphorothioate antisense

CC oligonucleotides for use in the composition of the present invention.

CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other

CC phosphorothioate oligonucleotides used in the exemplification of the

CC present invention

XX

SQ Sequence 10 BP; 1 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGG 10

Db 2 GGAGGGCGG 10

RESULT 453

AAZ79737/c

ID AAZ79737 standard; DNA; 10 BP.

XX AAZ79737;

XX

DT 10-APR-2000 (first entry)

XX Human colon tumour upregulated gene SAGE tag, SEQ ID NO:28.

DE

XX

XX SAGE tag; serial analysis of gene expression; diagnosis;

KW differential gene expression; characterisation; targetted expression;

KW tumour; cancer; immunotherapy; ss.

XX

OS Homo sapiens.

XX

XX WO966303-A2.

XX

XX 23-DEC-1999.

XX

XX 17-JUN-1999; 99WO-US013820.

XX

PR 19-JUN-1998; 98US-0089833P.

PR 19-JUN-1998; 98US-0089844P.

PR 19-JUN-1998; 98US-0089853P.

PR 19-JUN-1998; 98US-0089878P.

PR 19-JUN-1998; 98US-008991P.

PR 19-JUN-1998; 98US-008992P.

PR 19-JUN-1998; 98US-008993P.

PR 19-JUN-1998; 98US-008994P.

PR 19-JUN-1998; 98US-008997P.

PR 19-JUN-1998; 98US-008999P.

PR 19-JUN-1998; 98US-009000P.

PR 19-JUN-1998; 98US-0090035P.

PR 19-JUN-1998; 98US-0090036P.

PR 19-JUN-1998; 98US-0090039P.

PR 19-JUN-1998; 98US-0090040P.

PR 19-JUN-1998; 98US-0090041P.

PR 19-JUN-1998; 98US-0090042P.

PR 19-JUN-1998; 98US-0090043P.

PR 19-JUN-1998; 98US-0090044P.

PR 19-JUN-1998; 98US-0090045P.

PR 19-JUN-1998; 98US-0090047P.

PR 19-JUN-1998; 98US-0090048P.

PR 19-JUN-1998; 98US-0090072P.

PR 19-JUN-1998; 98US-0090076P.

PR 19-JUN-1998; 98US-0090077P.

PR 19-JUN-1998; 98US-0090078P.

PR 19-JUN-1998; 98US-0090079P.

PR 19-JUN-1998; 98US-0090080P.

PR 08-DEC-1998; 98US-011715P.

XX (GENZ) GENZYME CORP.

PA (ROBE/) ROBERTS B L.

PA (SHAN/) SHANKARA S.

XX

PI Roberts BL, Shankara S;

XX

DR WPI; 2000-106132/09.

XX

PT New polynucleotide useful in cancer immunotherapy.

XX

PS Claim 1; Page 52; 97pp; English.

XX

CC Sequences AAZ79710-279916 represent SAGE (serial analysis of gene

CC expression) tags used to identify mRNA transcripts which are

CC differentially expressed in a variety of normal or malignant cell types.

CC Some of the transcripts correspond to known genes or ESTs (expressed

CC sequence tags) which were previously unknown to be preferentially or

CC differentially expressed in that particular cell type, while other

CC transcripts correspond to novel genes. The invention also provides a

CC nucleotide comprising a promoter sequence derived from one of the

CC differentially expressed genes, which may optionally be operably linked

CC to a foreign nucleotide sequence, and gene delivery vehicles and host

CC cells comprising the polynucleotides of the invention. A nucleotide

CC comprising sequences AAZ79710-279916 may be used in diagnostic procedures

CC to characterise a cell of a specific tissue type and to determine whether

CC it is normal or malignant. They may be used to screen for agents that

CC modulate expression of differentially expressed genes compound. The

CC promoter/foreign gene construct of the invention may be used for

CC targetted expression of the foreign gene in a particular cell type. For

CC example, a promoter derived from a gene preferentially expressed in

CC dendritic cells (antigen-presenting cells, or APCs), may be operably

CC linked to a sequence encoding an immunostimulatory molecule and a

CC sequence encoding an antigen. Such a construct could be transduced into

CC APCs and would be useful for inducing an immune response by educating

CC immune effector cells in vivo, or in cancer immunotherapy

XX

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATC 14

Db 9 GGCAGCATC 1

RESULT 454

AAZ89806/c

ID AAZ89806 standard; cDNA; 10 BP.

XX

AC AAZ89806;

XX

DT 05-MAY-2000 (first entry)

XX Differential display primer OPE7 used in rchd005 cloning.
 DE
 XX
 KW Differentially expressed; cardiovascular disease; atherosclerosis;
 KW ischaemia; reperfusion; hypertension; restenosis; arterial inflammation;
 KW rchd005; transmembrane protein; ss.
 XX
 OS Synthetic.
 XX
 PN US6020463-A.
 XX
 PD 01-FEB-2000.
 XX
 PF 06-OCT-1997; 97US-00944423.
 XX
 PR 10-FEB-1995; 95US-00386844.
 PR 07-JUN-1995; 95US-00485573.
 PR 09-FEB-1996; 96US-00599654.
 XX
 PA (BGHM) BRIGHAM & WOMENS HOSPITAL.
 PA (MILL-) MILLENNIUM PHARM INC.
 XX
 PI Gimbrone MA, Falb DA;
 XX
 DR WPI; 2000-146911/13.
 XX
 XX Marker proteins for the diagnosis of cardiovascular diseases such as
 PT atherosclerosis and hypertension, comprising peptide sequences derived
 PT from the rchd523 transmembrane protein.
 XX
 PS Disclosure; Col 9; 121pp; English.
 XX
 CC This sequence represents a differential display primer, used in the
 CC cloning of rchd005. Rchd005 is related to the rchd523 transmembrane
 CC polypeptide (see AAY78506) encoded by cDNA contained in the plasmid
 CC pfchd523. The rchd523 protein is differentially expressed in diseased
 CC cells compared to healthy cells. The rchd523 protein may be used as a
 CC marker protein for the diagnosis of cardiovascular diseases including
 CC atherosclerosis, ischaemia, reperfusion, hypertension, restenosis and
 CC arterial inflammation. rchd523 peptides may be used as antigens in the
 CC production of antibodies specific for rchd523. The anti-rchd523
 CC antibodies may then be used in diagnostic assays to quantitate rchd523
 CC peptides in samples
 XX
 SQ Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GCGCGCATC 14
 ||| |||||
 Db 10 GCGTGCATC 2
 RESULT 455
 AAF19268
 ID AAF19268 standard; DNA; 10 BP.
 XX
 AC AAF19268;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Human adenosine A1 receptor polynucleotide fragment #835.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;

KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PF 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 119; 1592pp; English.
 XX
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 10 BP; 1 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 7 GCGGCATCG 15
 ||||| |
 Db 1 GCGGCATCG 9
 RESULT 456
 AAF19157
 ID AAF19157 standard; DNA; 10 BP.
 XX
 AC AAF19157;
 XX

DT 14-MAR-2001 (first entry)
XX Human adenosine A1 receptor polynucleotide fragment #724.
XX
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
XX human; airway disorder; bronchoconstriction; lung inflammation;
DE surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antisthmatic; analgesic; hypotensive; cytostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
OS Homo sapiens.
XX
XX WO200062736-A2.
XX
XX 26-OCT-2000.
XX
XX 24-MAR-2000; 2000WO-US008020.
XX
XX 06-APR-1999; 99US-0127958P.
XX
XX (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
XX Nyce JW;
XX
XX WPI; 2000-679539/66.
XX
XX Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
XX Claim 14; Page 117; 1592pp; English.
XX
XX The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antisthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
XX Sequence 10 BP; 1 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
SQ

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGCGG 10
DB 2 GGAGGCGG 10
RESULT 457
AAZ88018/c
ID AAZ88018 standard; DNA; 10 BP.
XX
XX AAZ88018;
XX 19-APR-2000 (first entry)
XX
XX Human umbilical vein endothelial cell forward primer SEQ ID NO:18.
XX
XX Cardiovascular disease; diagnosis; atherosclerosis; ischaemia;
KW reperfusion; hypertension; restenosis; arterial inflammation;
KW antiarteriosclerotic; vasotropic; hypotensive; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6018025-A.
XX
XX 25-JAN-2000.
XX
XX 06-OCT-1997; 97US-00944868.
XX
XX 10-FEB-1995; 95US-00386844.
PR 07-JUN-1995; 95US-00485573.
PR 09-FEB-1996; 96US-00599654.
XX
XX (MILL-) MILLENIUM PHARM INC.
PA (BGHM) BRIGHAM & WOMENS HOSPITAL.
XX
XX Falb DA, Gimbrone MA;
XX
XX WPI; 2000-136704/12.
XX
XX Isolated polypeptide for treating and diagnosing cardiovascular disease,
PT such as, atherosclerosis, ischemia/reperfusion, hypertension, restenosis
PT and arterial inflammation.
XX
XX Example; Col 9; 122pp; English.
XX
XX The present invention describes an isolated polypeptide (I) comprising
CC either the amino acid sequence of 1481 residues, given in AAY68447, or an
CC amino acid sequence encoded by the cDNA contained in plasmids pFCHD528A
CC (ATCC 69985), pFCHD528B (ATCC 69986) and pFCHD528C (ATCC 69987). The
CC polypeptide is useful in the treatment and diagnosis of cardiovascular
CC disease, such as, atherosclerosis, ischaemia/reperfusion, hypertension,
CC restenosis and arterial inflammation. AAZ88001 to AAZ88040, and AAY68444
CC to AAY68457 represent sequences used in the exemplification of the
CC present invention
XX
XX Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
SQ

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GGCGGCATC 14
DB 10 GGCTGCATC 2
RESULT 458
AAD04430
ID AAD04430 standard; DNA; 10 BP.
XX
XX AAD04430;
XX
XX 04-JUL-2001 (first entry)
DT

```

XX DE Primer #6 for detecting human HTR1B gene polymorphisms.
XX
XX Human; 5-hydroxytryptamine receptor 1B; HTR1B; serotonin; gene therapy;
KW therapeutic; forensic application; migraine; neurological disorder;
KW primer; 86.
XX Homo sapiens.
XX WO200125194-A2.
XX 12-APR-2001.
XX
XX 05-OCT-2000; 2000WO-US027486.
XX
XX 07-OCT-1999; 99US-0158114P.
XX
XX (GENA-) GENAISANCE PHARM INC.
XX
XX Choi JY, Denton RR, Nandabalan K, Stephens JC;
XX WPI; 2001-290602/30.
XX
XX Polynucleotide useful for therapeutic purposes, comprises nucleotide
PT polymorphisms in 5-hydroxytryptamine (serotonin) receptor 1B gene.
XX
XX Disclosure; Page 16; 47pp; English.
XX
XX The patent discloses a polynucleotide comprising one or more of 3 novel
CC single nucleotide polymorphisms in the human 5-hydroxytryptamine
CC (serotonin) receptor 1B (HTR1B) gene. The polymorphic variant comprises
CC at least one polymorphism selected from guanine at PS1, thymine at PS2,
CC and adenine at PS4, or adenine at position corresponding to nucleotide
CC 540. The HTR1B gene is useful for therapeutic purposes. It is useful in
CC studying the expression and biological function HTR1B, as well as in
CC developing drugs targeting this protein. It is also useful in
CC diagnostics and forensic applications. Identification of an association
CC between a trait and at least one genotype or haplotype of HTR1B is useful
CC for developing tests and therapeutic treatments for migraine and other
CC neurological disorders. It is also used in gene therapy. The present DNA
CC sequence is a primer which is used to detect the polymorphisms in HTR1B
CC gene by primer-extension technique
XX
XX Sequence 10 BP; 2 A; 3 C; 5 G; 0 T; 0 U; 0 Other;
SQ
    Query Match      46.3%; Score 7.4; DB 1; Length 10;
    Best Local Similarity 88.9%; Pred. No. 2.8e+02;
    Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GCGGCATCG 15
Db 1 GCGGCACGC 9

RESULT 459
AAD20864
ID AAD20864 standard; DNA; 10 BP.
XX
XX AAD20864;
XX
XX 03-JAN-2002 (first entry)
XX
XX Human CHRN3 gene polymorphism detecting primer #12.
XX
XX Human; cholinergic receptor, nicotinic, beta polypeptide 3; CHRN3;
KW single nucleotide polymorphism; SNP; drug screening; Alzheimer's disease;
KW neurological disorder; gene therapy; genotyping; haplotyping; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200175063-A2.
XX
XX 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010277.
XX
XX 03-APR-2000; 2000US-0194162P.
XX
XX (GENA-) GENAISANCE PHARM INC.
XX (CHEW/) CHEW A.
XX (CHOI/) CHOI J Y.
XX (KOSH/) KOSHY B.
XX (STEP/) STEPHENS J C.
XX
XX Chew A, Choi JY, Koshy B, Stephens JC;
XX WPI; 2001-626425/72.
XX
XX New polynucleotide, useful for studying expression and function of
PT CHRN3, comprises polymorphic variant of cholinergic receptor, nicotinic,
PT beta polypeptide 3 (CHRN3) gene, containing one of polymorphic sites PS1
PT -PS8.
XX
XX Claim 17; Page 15; 68pp; English.
XX
XX The invention relates to methods for haplotyping cholinergic receptor,
CC nicotinic, beta polypeptide 3 (CHRN3) gene. The invention also provides
CC single nucleotide polymorphisms (SNP) in the human CHRN3 gene.
CC Polymorphic variants of CHRN3 gene is used for screening for candidate
CC drugs to treat diseases related to CHRN3 activity. They are also useful
CC in studying the effect of variation on the biological activity of CHRN3
CC as well as on the binding affinity of candidate drugs targeting CHRN3
CC for treating Alzheimer's disease and other neurological disorders. They
CC are also useful in gene therapy. Compositions comprising CHRN3 gene
CC polymorphic variants are useful for genotyping and/or haplotyping a
CC CHRN3 gene in an individual. The present sequence is a primer used to
CC detect human CHRN3 gene polymorphisms. Human CHRN3 gene includes 8
CC polymorphic sites PS1-PS8
XX
XX Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
SQ
    Query Match      46.3%; Score 7.4; DB 1; Length 10;
    Best Local Similarity 88.9%; Pred. No. 2.8e+02;
    Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCATC 14
Db 1 GCGGCATC 9

RESULT 460
AAF99933/c
ID AAF99933 standard; DNA; 10 BP.
XX
XX AAF99933;
XX
XX 12-JUN-2001 (first entry)
XX
XX Immunostimulatory nucleic acid #1049.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX Synthetic.
XX
XX WO200122972-A2.
XX
XX 05-APR-2001.
XX
XX 25-SEP-2000; 2000WO-US026383.
XX
XX 25-SEP-1999; 99US-0156113P.
XX 27-SEP-1999; 99US-0156135P.
XX 23-AUG-2000; 2000US-0227436P.

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PS Claim 13; Page 69; 94pp; English.
XX
CC The present invention describes a method of identifying the type of cell
CC in a sample, involving determining which of the sequences AAH63161-
CC AAH64724 is expressed by the cell. The transcriptomes described in the
CC invention are cell-type specific, cancer specific or ubiquitously
CC expressed in humans. They can also be used to screen for drugs, reduce
CC cancer specific gene expression, standardise expression and restore the
CC function of a diseased cell or tissue. The present sequence is one of the
CC transcriptomes described in the exemplification of the invention
XX
SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGC 11
DB 10 GCCGGCGGC 2

RESULT 466
AAH64624/c
ID AAH64624 standard; cDNA; 10 BP.
XX
AC AAH64624;
XX
DT 20-SEP-2001 (first entry)
XX
DE Human colon cancer associated transcriptome sequence SEQ ID NO: 1464.
XX
KW Human; transcriptome; gene expression pattern; cancer; drug screening;
KW cancer diagnosis; cell specific gene expression; ss.
XX
OS Homo sapiens.
XX
PN WO200138577-A2.
XX
PD 31-MAY-2001.
XX
PF 21-NOV-2000; 2000WO-US031922.
XX
PR 24-NOV-1999; 99US-00448480.
XX
PA (UYJO ) UNIV JOHNS HOPKINS.
XX
PI Velculescu VE, Vogelstein B, Kinzler KW;
XX
DR WPI; 2001-367706/38.
XX
PT New isolated polynucleotides, useful for identifying specific cell type,
PT such as cancer cell, comprises transcriptomes expressed in particular
PT cell types.
XX
PS Claim 11; Page 40; 94pp; English.
XX
CC The present invention describes a method of identifying the type of cell
CC in a sample, involving determining which of the sequences AAH63161-
CC AAH64724 is expressed by the cell. The transcriptomes described in the
CC invention are cell-type specific, cancer specific or ubiquitously
CC expressed in humans. They can also be used to screen for drugs, reduce
CC cancer specific gene expression, standardise expression and restore the
CC function of a diseased cell or tissue. The present sequence is one of the
CC transcriptomes described in the exemplification of the invention
XX
SQ Sequence 10 BP; 2 A; 4 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CCGGGCGGCA 12
DB 1 CAGGGCGGCA 9

RESULT 468
AAH64506
ID AAH64506 standard; cDNA; 10 BP.
XX
AC AAH64506;
XX
DT 20-SEP-2001 (first entry)
XX
DE Human ubiquitously expressed transcriptome sequence SEQ ID NO: 1346.
XX
KW Human; transcriptome; gene expression pattern; cancer; drug screening;
KW cancer diagnosis; cell specific gene expression; ss.
XX
OS Homo sapiens.

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XX WO200138577-A2.
 XX 31-MAY-2001.
 XX 21-NOV-2000; 2000WO-US031922.
 XX 24-NOV-1999; 99US-00448480.
 XX (UYJO) UNIV JOHNS HOPKINS.
 XX Velulescu VE, Vogelstein B, Kinzler KW;
 XX WPI; 2001-367706/38.
 XX
 XX New isolated polynucleotides, useful for identifying specific cell type,
 PT such as cancer cell, comprises transcriptsomes expressed in particular
 PT cell types.
 XX
 XX Claim 13; Page 70; 94pp; English.
 XX
 XX The present invention describes a method of identifying the type of cell
 CC in a sample, involving determining which of the sequences AAH63161-
 CC AAH64724 is expressed by the cell. The transcriptsomes described in the
 CC invention are cell-type specific, cancer specific or ubiquitously
 CC expressed in humans. They can also be used to screen for drugs, reduce
 CC cancer specific gene expression, standardise expression and restore the
 CC function of a diseased cell or tissue. The present sequence is one of the
 CC transcriptsomes described in the exemplification of the invention
 XX
 XX Sequence 10 BP; 1 A; 4 C; 5 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGCGCGGCG 9
 DB 2 CGACGGGCG 10
 XX
 XX RESULT 469
 XX AAH64690/c
 XX ID AAH64690 standard; cDNA; 10 BP.
 XX AC AAH64690;
 XX 20-SEP-2001 (first entry)
 XX Human highly expressed transcriptome sequence SEQ ID NO: 1528.
 XX Human; transcriptome; gene expression pattern; cancer; drug screening;
 XX cancer diagnosis; cell specific gene expression; ss.
 XX Homo sapiens.
 XX WO200138577-A2.
 XX 31-MAY-2001.
 XX 21-NOV-2000; 2000WO-US031922.
 XX 24-NOV-1999; 99US-00448480.
 XX (UYJO) UNIV JOHNS HOPKINS.
 XX Velulescu VE, Vogelstein B, Kinzler KW;
 XX WPI; 2001-367706/38.
 XX
 XX New isolated polynucleotides, useful for identifying specific cell type,
 PT such as cancer cell, comprises transcriptsomes expressed in particular
 PT cell types.

XX
 PS
 XX Disclosure; Page 76; 94pp; English.
 CC
 CC The present invention describes a method of identifying the type of cell
 CC in a sample, involving determining which of the sequences AAH63161-
 CC AAH64724 is expressed by the cell. The transcriptsomes described in the
 CC invention are cell-type specific, cancer specific or ubiquitously
 CC expressed in humans. They can also be used to screen for drugs, reduce
 CC cancer specific gene expression, standardise expression and restore the
 CC function of a diseased cell or tissue. The present sequence is one of the
 CC transcriptsomes described in the exemplification of the invention
 XX
 XX Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGCGGCG 11
 DB 10 GCGGCGGCG 2
 XX
 XX RESULT 470
 XX AAH32940/c
 XX ID AAH32940 standard; cDNA; 10 BP.
 XX AC AAH32940;
 XX 13-AUG-2001 (first entry)
 XX LPS activated human monocyte expression gene cDNA tag SEQ:313.
 XX Human; LPS; lipopolysaccharide; monocyte expression gene; tag; EST;
 XX expressed sequence tag; diagnosis; human disease; treatment; ss.
 XX Homo sapiens.
 XX JP2001069993-A.
 XX 21-MAR-2001.
 XX 28-APR-2000; 2000JP-00131079.
 XX 08-JUL-1999; 99JP-00195103.
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 XX WPI; 2001-304369/32.
 XX LPS activated human monocyte expression gene group.
 XX Claim 19; Page 49; 52pp; Japanese.
 XX The present invention describes a lipopolysaccharide (LPS) activated
 CC human monocyte expression gene group consisting of the high-ranking 50
 CC genes of the highest expression among the genes expressed by human
 CC monocyte stimulated by LPS in which the cDNA of each gene has the base
 CC sequence of (AAH32628 to AAH32677) continuous to the base sequence 5'-
 CC CATG-3', nearest to the polyA region. The gene group is useful for the
 CC development of new means for the diagnosis and the treatment of various
 CC human diseases in which human monocyte plays an important role. AAH32628
 CC to AAH32943 represent specifically claimed LPS activated human monocyte
 CC expression gene cDNA tags from the present invention. AAH32944 represents
 CC an LPS activated human monocyte expression gene cDNA sequence encoding
 CC AAB98009, which are given in the exemplification of the present invention
 XX
 XX Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      3 GCGGGCGGC 11
Db      10 GCCGGCGGC 2

RESULT 471
ID ABA06088/c
XX ABA06088 standard; cDNA; 10 BP.
AC ABA06088;
XX
DT 10-JAN-2002 (first entry)
XX
DE Human normal hepatocyte expression gene cDNA, SEQ ID NO: 65.
KW Human; hepatocyte; gene expression; hepatopathy; ss.
XX
OS Homo sapiens.
XX
PN JP2001211883-A.
XX
PD 07-AUG-2001.
XX
PF 31-JAN-2000; 2000JP-000231170.
XX
PR 31-JAN-2000; 2000JP-000231170.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR WPI; 2001-629566/73.
XX
PT Human normal hepatocyte expression gene group.
XX
PS Claim 1; Page 7; 26pp; Japanese.
XX
CC The invention relates to a human normal hepatocyte expression gene group
CC comprising 200 genes in the human normal hepatocyte. The cDNA of each
CC gene comprises one of 200 fully defined nucleotide sequences as given in
CC the specification. The gene group and the cDNAs corresponding to each of
CC the genes in the group are useful in the diagnosis and treatment of human
CC hepatopathy. The present sequence is a cDNA corresponding to a gene
CC expressed by normal human hepatocytes
XX
SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGC 11
Db      10 GCCGGCGGC 2

RESULT 472
AAF39569/c
ID AAF39569 standard; DNA; 10 BP.
XX
AC AAF39569;
XX
DT 23-MAR-2001 (first entry)
XX
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:6308.
XX
KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
OS Saccharomyces cerevisiae.
XX
PN WO200077214-A2.
XX

PD 21-DEC-2000.
XX
PF 14-JUN-2000; 2000WO-US016223.
XX
PR 16-JUN-1999; 99US-00335032.
XX
PA (UYJO ) UNIV JOHNS HOPKINS.
XX
PI Velculescu V, Vogelstein B, Kinzler K;
XX
DR WPI; 2001-061874/07.
XX
PT Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
PS Example; Page 225; 419pp; English.
XX
CC The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
SQ Sequence 10 BP; 2 A; 5 C; 3 G; 0 T; 0 U; 0 Other;

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGC 11
Db      10 GCCGGCGGC 2

RESULT 473
AAF34859/c
ID AAF34859 standard; DNA; 10 BP.
XX
AC AAF34859;
XX
DT 23-MAR-2001 (first entry)
XX
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:1598.
XX
KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
OS Saccharomyces cerevisiae.
XX

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XX WO200077214-A2.
 XX 21-DEC-2000.
 XX 14-JUN-2000; 2000WO-US016223.
 XX 16-JUN-1999; 99US-00335032.
 XX (UYJO) UNIV JOHNS HOPKINS.
 XX Velulescu V, Vogelstein B, Kinzler K;
 XX WPI; 2001-061874/07.
 XX Yeast gene coding sequences comprising NORF genes with serial analysis of
 PT gene expression (SAGE) tags, useful for studying, monitoring and
 PT affecting phases of the cell cycle.
 XX Example; Page 57; 419pp; English.
 XX The present invention describes an isolated DNA molecule comprising a
 CC coding sequence of a yeast gene selected from a group of 745 NORF (not
 CC previously assigned open reading frame; or nonannotated ORF) genes
 CC comprising a SAGE (serial analysis of gene expression) tag. Also
 CC described are: (1) a method (M1) of using NORF genes to affect the cell
 CC cycle comprising administering a NORF gene whose expression varies by at
 CC least 10% between any two phases of the cell cycle selected from log
 CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
 CC antifungal drugs comprising: (a) contacting a test substance with a yeast
 CC cell; and (b) monitoring expression of a NORF gene whose expression
 CC varies as in M1, where a test substance which modifies the expression of
 CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
 CC identifying human genes which are involved in cell cycle progression
 CC comprising contacting human DNA with a probe which comprises at least 10
 CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
 CC and (4) a method (M4) for identifying a candidate drug as a member of a
 CC class of drugs having a characteristic effect on gene expression in a
 CC yeast cell comprising contacting a yeast cell with a candidate drug and
 CC monitoring expression in the yeast cell of at least 1 NORF gene whose
 CC expression is affected by the class of drugs. The NORF genes may be used
 CC to study, monitor and affect phases of the cell cycle, the differentially
 CC expressed genes may be used as markers of phases of the cell cycle. The
 CC methods may be used to identify candidate drugs which affect the cell
 CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064
 CC represent SAGE tags used in the exemplification of the present invention.
 CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
 CC method, in the exemplification of the present invention
 XX Sequence 10 BP; 2 A; 4 C; 2 G; 2 T; 0 U; 0 Other;
 SQ Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02; Mismatches 0; Gaps 0;
 Matches 8; Conservative 0; Indels 1; Indels 0; Gaps 0;
 QY 5 GGGCGGCAT 13
 Db ||||| |||||
 9 GGGCAGCAT 1
 RESULT 474
 AAF38042/c
 ID AAF38042 standard; DNA; 10 BP.
 XX AAF38042;
 AC AAF38042;
 XX 23-MAR-2001 (first entry)
 DT Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:4781.
 DE Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
 KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
 KW serial analysis of gene expression; antifungal; tag; identification;

KW linker; PCR primer; ds.
 XX Saccharomyces cerevisiae.
 XX WO200077214-A2.
 XX 21-DEC-2000.
 XX 14-JUN-2000; 2000WO-US016223.
 XX 16-JUN-1999; 99US-00335032.
 XX (UYJO) UNIV JOHNS HOPKINS.
 XX Velulescu V, Vogelstein B, Kinzler K;
 XX WPI; 2001-061874/07.
 XX Yeast gene coding sequences comprising NORF genes with serial analysis of
 PT gene expression (SAGE) tags, useful for studying, monitoring and
 PT affecting phases of the cell cycle.
 XX Example; Page 170; 419pp; English.
 XX The present invention describes an isolated DNA molecule comprising a
 CC coding sequence of a yeast gene selected from a group of 745 NORF (not
 CC previously assigned open reading frame; or nonannotated ORF) genes
 CC comprising a SAGE (serial analysis of gene expression) tag. Also
 CC described are: (1) a method (M1) of using NORF genes to affect the cell
 CC cycle comprising administering a NORF gene whose expression varies by at
 CC least 10% between any two phases of the cell cycle selected from log
 CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
 CC antifungal drugs comprising: (a) contacting a test substance with a yeast
 CC cell; and (b) monitoring expression of a NORF gene whose expression
 CC varies as in M1, where a test substance which modifies the expression of
 CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
 CC identifying human genes which are involved in cell cycle progression
 CC comprising contacting human DNA with a probe which comprises at least 10
 CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
 CC and (4) a method (M4) for identifying a candidate drug as a member of a
 CC class of drugs having a characteristic effect on gene expression in a
 CC yeast cell comprising contacting a yeast cell with a candidate drug and
 CC monitoring expression in the yeast cell of at least 1 NORF gene whose
 CC expression is affected by the class of drugs. The NORF genes may be used
 CC to study, monitor and affect phases of the cell cycle, the differentially
 CC expressed genes may be used as markers of phases of the cell cycle. The
 CC methods may be used to identify candidate drugs which affect the cell
 CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064
 CC represent SAGE tags used in the exemplification of the present invention.
 CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
 CC method, in the exemplification of the present invention
 XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 SQ Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02; Mismatches 0; Gaps 0;
 Matches 8; Conservative 0; Indels 1; Indels 0; Gaps 0;
 QY 8 CGGCATCGT 16
 Db ||||| |||||
 10 CGGCAACGT 2
 RESULT 475
 AAF40167/c
 ID AAF40167 standard; DNA; 10 BP.
 XX AAF40167;
 AC AAF40167;
 XX 23-MAR-2001 (first entry)
 DT Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:6906.
 DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:6906.
 XX

KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX Saccharomyces cerevisiae.
XX WO200077214-A2.
XX 21-DEC-2000.
XX 14-JUN-2000; 2000WO-US016223.
XX 16-JUN-1999; 99US-00335032.
XX (UYJO) UNIV JOHNS HOPKINS.
XX Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX Example; Page 246; 419pp; English.
XX The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
SQ Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 8 CGGCATCGT 16
Db |||||
9 CGGCATCAT 1
RESULT 476
AAF33464
ID AAF33464 standard; DNA; 10 BP.
XX AAF33464;
XX AC
XX 23-MAR-2001 (first entry)
DT

XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:203.
DE
XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX Saccharomyces cerevisiae.
XX WO200077214-A2.
XX 21-DEC-2000.
XX 14-JUN-2000; 2000WO-US016223.
XX 16-JUN-1999; 99US-00335032.
XX (UYJO) UNIV JOHNS HOPKINS.
XX Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX Claim 1; Page 26; 419pp; English.
XX The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
SQ Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 CGGCGGGCG 9
Db |||||
2 CGGCGGGTG 10
RESULT 477
AAF40982
ID AAF40982 standard; DNA; 10 BP.
XX

```

AC AAF40982;
XX
XX 23-MAR-2001 (first entry)
XX
XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:7721.
XX
XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
XX nor previously assigned open reading frame; nonannotated ORF; SAGE;
XX serial analysis of gene expression; antifungal; tag; identification;
XX linker; PCR primer; ds.
XX
XX Saccharomyces cerevisiae.
XX
XX WO200077214-A2.
XX
XX 21-DEC-2000.
XX
XX 14-JUN-2000; 2000WO-US016223.
XX
XX 16-JUN-1999; 99US-00335032.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Velulescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
XX Yeast gene coding sequences comprising NORF genes with serial analysis of
XX gene expression (SAGE) tags, useful for studying, monitoring and
XX affecting phases of the cell cycle.
XX
XX Example; Page 275; 419pp; English.
XX
XX The present invention describes an isolated DNA molecule comprising a
XX coding sequence of a yeast gene selected from a group of 745 NORF (not
XX previously assigned open reading frame; or nonannotated ORF) genes
XX comprising a SAGE (serial analysis of gene expression) tag. Also
XX described are: (1) a method (M1) of using NORF genes to affect the cell
XX cycle comprising administering a NORF gene whose expression varies by at
XX least 10% between any two phases of the cell cycle selected from log
XX phase, S phase and G2/M; (2) a method (M2) for screening candidate
XX antifungal drugs comprising: (a) contacting a test substance with a yeast
XX cell; and (b) monitoring expression of a NORF gene whose expression
XX varies as in M1, where a test substance which modifies the expression of
XX the yeast gene is a candidate antifungal drug; (3) a method (M3) for
XX identifying human genes which are involved in cell cycle progression
XX comprising contacting human DNA with a probe which comprises at least 10
XX contiguous nucleotides of a NORF gene whose expression varies as in M1;
XX and (4) a method (M4) for identifying a candidate drug as a member of a
XX class of drugs having a characteristic effect on gene expression in a
XX yeast cell comprising contacting a yeast cell with a candidate drug and
XX monitoring expression in the yeast cell of at least 1 NORF gene whose
XX expression is affected by the class of drugs. The NORF genes may be used
XX to study, monitor and affect phases of the cell cycle, the differentially
XX expressed genes may be used as markers of phases of the cell cycle. The
XX methods may be used to identify candidate phases of the cell cycle. The
XX cycle and for identification of antifungal drugs. AAF33268 to AAF44064
XX represent SAGE tags used in the exemplification of the present invention.
XX AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
XX method, in the exemplification of the present invention
XX
XX Sequence 10 BP; 2 A; 4 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 4 CGGCGCGCA 12
XX |||||
XX 2 CGGACGCA 10
XX
XX RESULT 478

```

```

AAF35961/C
ID AAF35961 standard; DNA; 10 BP.
XX
XX AAF35961;
XX
XX 23-MAR-2001 (first entry)
XX
XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:2700.
XX
XX Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
XX nor previously assigned open reading frame; nonannotated ORF; SAGE;
XX serial analysis of gene expression; antifungal; tag; identification;
XX linker; PCR primer; ds.
XX
XX Saccharomyces cerevisiae.
XX
XX WO200077214-A2.
XX
XX 21-DEC-2000.
XX
XX 14-JUN-2000; 2000WO-US016223.
XX
XX 16-JUN-1999; 99US-00335032.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Velulescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
XX Yeast gene coding sequences comprising NORF genes with serial analysis of
XX gene expression (SAGE) tags, useful for studying, monitoring and
XX affecting phases of the cell cycle.
XX
XX Example; Page 96; 419pp; English.
XX
XX The present invention describes an isolated DNA molecule comprising a
XX coding sequence of a yeast gene selected from a group of 745 NORF (not
XX previously assigned open reading frame; or nonannotated ORF) genes
XX comprising a SAGE (serial analysis of gene expression) tag. Also
XX described are: (1) a method (M1) of using NORF genes to affect the cell
XX cycle comprising administering a NORF gene whose expression varies by at
XX least 10% between any two phases of the cell cycle selected from log
XX phase, S phase and G2/M; (2) a method (M2) for screening candidate
XX antifungal drugs comprising: (a) contacting a test substance with a yeast
XX cell; and (b) monitoring expression of a NORF gene whose expression
XX varies as in M1, where a test substance which modifies the expression of
XX the yeast gene is a candidate antifungal drug; (3) a method (M3) for
XX identifying human genes which are involved in cell cycle progression
XX comprising contacting human DNA with a probe which comprises at least 10
XX contiguous nucleotides of a NORF gene whose expression varies as in M1;
XX and (4) a method (M4) for identifying a candidate drug as a member of a
XX class of drugs having a characteristic effect on gene expression in a
XX yeast cell comprising contacting a yeast cell with a candidate drug and
XX monitoring expression in the yeast cell of at least 1 NORF gene whose
XX expression is affected by the class of drugs. The NORF genes may be used
XX to study, monitor and affect phases of the cell cycle, the differentially
XX expressed genes may be used as markers of phases of the cell cycle. The
XX methods may be used to identify candidate phases of the cell cycle. The
XX cycle and for identification of antifungal drugs. AAF33268 to AAF44064
XX represent SAGE tags used in the exemplification of the present invention.
XX AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
XX method, in the exemplification of the present invention
XX
XX Sequence 10 BP; 2 A; 4 C; 3 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 7 GCGGCATCG 15
XX |||||
XX 10 GTGGCATCG 2
XX
XX Db

```

RESULT 479
AAF33635
ID AAF33635 standard; DNA; 10 BP.
AC AAF33635;
XX
DT 23-MAR-2001 (first entry)
XX
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:374.
XX
KW Yeast; Saccharomyces cerevisiae; Characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
OS Saccharomyces cerevisiae.
XX
PN WO200077214-A2.
XX
PD 21-DEC-2000.
XX
PF 14-JUN-2000; 200WO-US016223.
XX
PR 16-JUN-1999; 99US-00335032.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
PT Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
PS Claim 1; Page 388; 419pp; English.
XX
CC The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the classes of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
SQ Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGGCG 9
| | | | | | | |
Db 2 CGCGGGGTG 10

RESULT 480
AAF37745
ID AAF37745 standard; DNA; 10 BP.
XX
AC AAF37745;
XX
DT 23-MAR-2001 (first entry)
XX
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:4484.
XX
KW Yeast; Saccharomyces cerevisiae; Characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
OS Saccharomyces cerevisiae.
XX
PN WO200077214-A2.
XX
PD 21-DEC-2000.
XX
PF 14-JUN-2000; 200WO-US016223.
XX
PR 16-JUN-1999; 99US-00335032.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Velculescu V, Vogelstein B, Kinzler K;
XX WPI; 2001-061874/07.
XX
PT Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
PS Example; Page 160; 419pp; English.
XX
CC The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the classes of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064
CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
SQ Sequence 10 BP; 0 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Best Local Similarity 88.9%; Pred. No. 2.8e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 8; Conservative 0;

QY 1 CGCGGGCG 9
|||
DB 2 CGCGGGTG 10
|||

RESULT 481
AAS98385/c
ID AAS98385 standard; DNA; 10 BP.
AC AAS98385;
XX
XX 12-MAR-2002 (first entry)
XX
XX Galanin receptor gene GALR1 allele-specific oligonucleotide #97.
XX
XX Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;
KW drug discovery; haplotyping; infectious diarrhoea;
KW growth hormone deficiency; allele-specific oligonucleotide; ss.
XX
XX Homo sapiens.
XX
XX WO200179237-A2.
XX
XX 25-OCT-2001.
XX
XX 16-APR-2001; 2001WO-US012306.
XX
XX 14-APR-2000; 2000US-0197838P.
XX
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;
PI WPI; 2002-066341/09.
XX
XX Genotyping human galanin receptor gene of an individual for determining
PT haplotype of an individual, involves determining the identity of
PT nucleotide pair at specific polymorphic sites for two copies of the gene.
XX
XX Claim 18; Page 16; 99pp; English.
XX
XX The invention relates to genotyping human galanin receptor (GALR1) gene
CC of an individual, involving determining for the two copies of the GALR1
CC gene present in the individual, the identity of the nucleotide pair at
CC one or more polymorphic sites. The method is useful for determining
CC whether an individual has a haplotype or haplotype pairs defined in the
CC specification. This is useful for improving the efficacy and reliability
CC of several steps in the discovery and development of drugs for treating
CC diseases associated with GALR1 activity, e.g., infectious diarrhoea and
CC growth hormone deficiency, to validate GALR1 as a candidate agent for
CC treating a specific condition or disease predicted to be associated with
CC GALR1 activity, and in the design of clinical trials of candidate drugs
CC for treating a specific condition or disease predicted to be associated
CC with GALR1 activity. The method is useful to screen for compounds
CC targeting GALR1 to treat a specific condition or disease associated with
CC GALR1 activity. A GALR1 polynucleotide or variant is useful in studying
CC the expression and function of GALR1, and in expressing GALR1 protein for
CC use in screening for candidate drugs to treat diseases related to GALR1
CC activity. The polynucleotide or variant is useful for studying expression
CC of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs
CC targeted against GALR1 protein, and for studying the effect of the
CC variation on the biological activity of GALR1 as well as on the binding
CC affinity of candidate drugs targeting GALR1 for the treatment of
CC infectious diarrhoea and growth hormone insufficiency. AAS98289- AAS98408
CC represent human GALR1 gene allele-specific oligonucleotides used to
CC detect GALR1 gene polymorphisms as described in the method of the
XX invention
XX
XX Sequence 10 BP; 0 A; 8 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2 GGCGGGCG 10
|||
DB 10 GGAGGGCG 2
|||

RESULT 482
AAS98388
ID AAS98388 standard; DNA; 10 BP.
XX
XX AAS98388;
XX
XX 12-MAR-2002 (first entry)
XX
XX Galanin receptor gene GALR1 allele-specific oligonucleotide #100.
XX
XX Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;
KW drug discovery; haplotyping; infectious diarrhoea;
KW growth hormone deficiency; allele-specific oligonucleotide; ss.
XX
XX Homo sapiens.
XX
XX WO200179237-A2.
XX
XX 25-OCT-2001.
XX
XX 16-APR-2001; 2001WO-US012306.
XX
XX 14-APR-2000; 2000US-0197838P.
XX
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;
PI WPI; 2002-066341/09.
XX
XX Genotyping human galanin receptor gene of an individual for determining
PT haplotype of an individual, involves determining the identity of
PT nucleotide pair at specific polymorphic sites for two copies of the gene.
XX
XX Claim 18; Page 16; 99pp; English.
XX
XX The invention relates to genotyping human galanin receptor (GALR1) gene
CC of an individual, involving determining for the two copies of the GALR1
CC gene present in the individual, the identity of the nucleotide pair at
CC one or more polymorphic sites. The method is useful for determining
CC whether an individual has a haplotype or haplotype pairs defined in the
CC specification. This is useful for improving the efficacy and reliability
CC of several steps in the discovery and development of drugs for treating
CC diseases associated with GALR1 activity, e.g., infectious diarrhoea and
CC growth hormone deficiency, to validate GALR1 as a candidate agent for
CC treating a specific condition or disease predicted to be associated with
CC GALR1 activity, and in the design of clinical trials of candidate drugs
CC for treating a specific condition or disease predicted to be associated
CC with GALR1 activity. The method is useful to screen for compounds
CC targeting GALR1 to treat a specific condition or disease associated with
CC GALR1 activity. A GALR1 polynucleotide or variant is useful in studying
CC the expression and function of GALR1, and in expressing GALR1 protein for
CC use in screening for candidate drugs to treat diseases related to GALR1
CC activity. The polynucleotide or variant is useful for studying expression
CC of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs
CC targeted against GALR1 protein, and for studying the effect of the
CC variation on the biological activity of GALR1 as well as on the binding
CC affinity of candidate drugs targeting GALR1 for the treatment of
CC infectious diarrhoea and growth hormone insufficiency. AAS98289- AAS98408
CC represent human GALR1 gene allele-specific oligonucleotides used to
CC detect GALR1 gene polymorphisms as described in the method of the
XX invention
XX
XX Sequence 10 BP; 0 A; 3 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGCGG 10
 |||||
 Db 2 GGCGGCGG 10

RESULT 483
 AAS98370
 ID AAS98370 standard; DNA; 10 BP.
 XX
 AC AAS98370;
 XX
 DT 12-MAR-2002 (first entry)
 XX
 DE Galanin receptor gene GALR1 allele-specific oligonucleotide #82.
 XX
 KW Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;
 KW drug discovery; haplotyping; infectious diarrhoea;
 KW growth hormone deficiency; allele-specific oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200179237-A2.
 XX
 PD 25-OCT-2001.
 XX
 PF 16-APR-2001; 2001WO-US012306.
 XX
 PR 14-APR-2000; 2000US-0197838P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;
 XX
 DR WPI; 2002-066341/09.
 XX
 PT Genotyping human galanin receptor gene of an individual for determining
 PT haplotype of an individual, involves determining the identity of
 PT nucleotide pair at specific polymorphic sites for two copies of the gene.
 XX
 PS Claim 18; Page 16; 99pp; English.
 XX
 CC The invention relates to genotyping human galanin receptor (GALR1) gene
 CC of an individual, involving determining for the two copies of the GALR1
 CC gene present in the individual, the identity of the nucleotide pair at
 CC one or more polymorphic sites. The method is useful for determining
 CC whether an individual has a haplotype or haplotype pairs defined in the
 CC specification. This is useful for improving the efficacy and reliability
 CC of several steps in the discovery and development of drugs for treating
 CC diseases associated with GALR1 activity, e.g., infectious diarrhoea and
 CC growth hormone deficiency, to validate GALR1 as a candidate agent for
 CC treating a specific condition or disease predicted to be associated with
 CC GALR1 activity, and in the design of clinical trials of candidate drugs
 CC for treating a specific condition or disease predicted to be associated
 CC with GALR1 activity. The method is useful to screen for compounds
 CC targeting GALR1 to treat a specific conditions or disease associated with
 CC GALR1 activity. A GALR1 polynucleotide or variant is useful in studying
 CC the expression and function of GALR1, and in expressing GALR1 protein for
 CC use in screening for candidate drugs to treat diseases related to GALR1
 CC activity. The polynucleotide or variant is useful for studying expression
 CC of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs
 CC targeted against GALR1 protein, and for studying the effect of the
 CC variation on the biological activity of GALR1 as well as on the binding
 CC affinity of candidate drugs targeting GALR1 for the treatment of
 CC infectious diarrhoea and growth hormone insufficiency. AAS98289- AAS98408
 CC represent human GALR1 gene allele-specific oligonucleotides used to
 CC detect GALR1 gene polymorphisms as described in the method of the
 CC invention

SQ Sequence 10 BP; 1 A; 1 C; 8 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGCGG 10
 |||||
 Db 2 GGCGGCGG 10

RESULT 484
 AAS98381/c
 ID AAS98381 standard; DNA; 10 BP.
 XX
 AC AAS98381;
 XX
 DT 12-MAR-2002 (first entry)
 XX
 DE Galanin receptor gene GALR1 allele-specific oligonucleotide #93.
 XX
 KW Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;
 KW drug discovery; haplotyping; infectious diarrhoea;
 KW growth hormone deficiency; allele-specific oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200179237-A2.
 XX
 PD 25-OCT-2001.
 XX
 PF 16-APR-2001; 2001WO-US012306.
 XX
 PR 14-APR-2000; 2000US-0197838P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;
 XX
 DR WPI; 2002-066341/09.
 XX
 PT Genotyping human galanin receptor gene of an individual for determining
 PT haplotype of an individual, involves determining the identity of
 PT nucleotide pair at specific polymorphic sites for two copies of the gene.
 XX
 PS Claim 18; Page 16; 99pp; English.
 XX
 CC The invention relates to genotyping human galanin receptor (GALR1) gene
 CC of an individual, involving determining for the two copies of the GALR1
 CC gene present in the individual, the identity of the nucleotide pair at
 CC one or more polymorphic sites. The method is useful for determining
 CC whether an individual has a haplotype or haplotype pairs defined in the
 CC specification. This is useful for improving the efficacy and reliability
 CC of several steps in the discovery and development of drugs for treating
 CC diseases associated with GALR1 activity, e.g., infectious diarrhoea and
 CC growth hormone deficiency, to validate GALR1 as a candidate agent for
 CC treating a specific condition or disease predicted to be associated with
 CC GALR1 activity, and in the design of clinical trials of candidate drugs
 CC for treating a specific condition or disease predicted to be associated
 CC with GALR1 activity. The method is useful to screen for compounds
 CC targeting GALR1 to treat a specific conditions or disease associated with
 CC GALR1 activity. A GALR1 polynucleotide or variant is useful in studying
 CC the expression and function of GALR1, and in expressing GALR1 protein for
 CC use in screening for candidate drugs to treat diseases related to GALR1
 CC activity. The polynucleotide or variant is useful for studying expression
 CC of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs
 CC targeted against GALR1 protein, and for studying the effect of the
 CC variation on the biological activity of GALR1 as well as on the binding
 CC affinity of candidate drugs targeting GALR1 for the treatment of
 CC infectious diarrhoea and growth hormone insufficiency. AAS98289- AAS98408
 CC represent human GALR1 gene allele-specific oligonucleotides used to
 CC detect GALR1 gene polymorphisms as described in the method of the
 CC invention

```

XX SQ Sequence 10 BP; 1 A; 6 C; 1 G; 2 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGCGGGCAT 13
Db 9 GGCGGGCAT 1

RESULT 485
ID AAS98391/C
AC AAS98391;
XX 12-MAR-2002 (first entry)
XX Galanin receptor gene GALR1 allele-specific oligonucleotide #103.
DE Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;
KW drug discovery; haplotyping; infectious diarrhoea;
KW growth hormone deficiency; allele-specific oligonucleotide; ss.
XX Homo sapiens.
XX WO200179237-A2.
XX 25-OCT-2001.
XX 16-APR-2001; 2001WO-US012306.
XX 14-APR-2000; 2000US-0197838P.
XX (GENA-) GENAISSANCE PHARM INC.
XX Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;
XX WPI; 2002-066341/09.
XX Genotyping human galanin receptor gene of an individual for determining
XX haplotype of an individual, involves determining the identity of
XX nucleotide pair at specific polymorphic sites for two copies of the gene.
XX Claim 18; Page 16; 99pp; English.
XX The invention relates to genotyping human galanin receptor (GALR1) gene
XX of an individual, involving determining for the two copies of the GALR1
XX gene present in the individual, the identity of the nucleotide pair at
XX one or more polymorphic sites. The method is useful for determining
XX whether an individual has a haplotype or haplotype pairs defined in the
XX specification. This is useful for improving the efficacy and reliability
XX of several steps in the discovery and development of drugs for treating
XX diseases associated with GALR1 activity, e.g., infectious diarrhoea and
XX growth hormone deficiency, to validate GALR1 as a candidate agent for
XX treating a specific condition or disease predicted to be associated with
XX GALR1 activity, and in the design of clinical trials of candidate drugs
XX for treating a specific condition or disease predicted to be associated
XX with GALR1 activity. The method is useful to screen for compounds
XX targeting GALR1. A GALR1 polynucleotide or variant is useful in studying
XX the expression and function of GALR1, and in expressing GALR1 protein for
XX use in screening for candidate drugs to treat diseases related to GALR1
XX activity. The polynucleotide or variant is useful for studying expression
XX of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs
XX targeted against GALR1 protein, and for studying the effect of the
XX variation on the biological activity of GALR1 as well as on the binding
XX affinity of candidate drugs targeting GALR1 for the treatment of
XX infectious diarrhoea and growth hormone insufficiency. AAS98289- AAS98408
XX represent human GALR1 gene allele-specific oligonucleotides used to
XX detect GALR1 gene polymorphisms as described in the method of the

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CC invention
XX SQ Sequence 10 BP; 0 A; 7 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGG 10
Db 9 GGCGGGCGG 1

RESULT 486
ID AAD26103/C
AC AAD26103 standard; DNA; 10 BP.
XX AAD26103;
XX 26-MAR-2002 (first entry)
XX Human apolipoprotein E (APOE) gene polymorphism detecting primer #26.
DE Human; antilipaemic; neuroprotective; nootropic; genetic variant; APOE;
KW apolipoprotein E; haplotyping; familial dysbetalipoproteinaemia; therapy;
KW genotyping; type III hyperlipoproteinaemia; Alzheimer's disease;
KW atherosclerosis; polymorphism; primer; ss.
XX Homo sapiens.
XX WO200179234-A2.
XX 25-OCT-2001.
XX 16-APR-2001; 2001WO-US012303.
XX 14-APR-2000; 2000US-0197188P.
XX (GENA-) GENAISSANCE PHARM INC.
XX Choi JY, Kliehm SE, Koshy B, Lee HH;
XX WPI; 2002-075064/10.
XX Genotyping human apolipoprotein gene of individual for determining
XX haplotype of individual, involves determining identity of nucleotide pair
XX at specific polymorphic sites for two copies of gene.
XX Claim 18; Page 15; 78pp; English.
XX The patent discloses novel genetic variants of human apolipoprotein E
XX (APOE) gene. The invention also relates to compositions and methods for
XX haplotyping and/or genotyping the APOE gene. The haplotyping methods of
XX the invention are useful for improving the efficacy and reliability of
XX several steps in the discovery and development of drugs for treating
XX diseases associated with APOE activity, e.g. familial
XX dysbetalipoproteinaemia, type III hyperlipoproteinaemia, atherosclerosis,
XX and Alzheimer's disease. They are useful to validate APOE as a candidate
XX agent for treating a specific condition or disease predicted to be
XX associated with APOE activity and in the design of clinical trials of
XX candidate drugs for treating a specific condition or disease predicted to
XX be associated with APOE activity. Genotyping or haplotyping methods are
XX useful to screen for compounds targeting APOE to treat a specific
XX condition or disease associated with APOE activity. The present DNA
XX sequence is a primer which is used for detecting human APOE gene
XX polymorphisms
XX SQ Sequence 10 BP; 1 A; 5 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      3 GCGGGCGGC 11
Db      9 GCGGGCGGC 1

RESULT 487
ABL42839
ID ABL42839 standard; cDNA; 10 BP.
XX
XX
XX ABL42839;
XX
XX 12-APR-2002 (first entry)
XX
XX Human maturation/activation dendritic cell expression gene tag #213.
XX
XX Human; maturation/activation dendritic cell expression gene; tag;
XX maturation; activation; dendritic cell; ss.
XX
XX Homo sapiens.
XX
XX JP2001327293-A.
XX
XX 27-NOV-2001.
XX
XX 22-MAY-2000; 2000JP-00150562.
XX
XX 22-MAY-2000; 2000JP-00150562.
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2002-127070/17.
XX
XX Human maturation/activation dendritic cell expression gene group.
XX
XX Claim 1; Page 10; 41pp; Japanese.
XX
XX The present invention describes a human maturation/activation dendritic
XX cell (DC) expression gene group consisting of 100 genes which show the
XX highest expression among the genes expressed in human maturation/
XX activation DC. Also described are: (1) a protein expressed by the above
XX human maturation/activation DC expression gene; (2) an antibody against
XX the protein; and (3) an antagonist against the expression of each gene
XX belonging to the above gene group. The gene group is useful for the
XX treatment and the diagnosis of various human diseases related to human
XX DC. ABL42627 to ABL42926 represent specifically claimed human
XX maturation/activation DC expression gene tags from the present invention
XX
XX Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGGCGGC 11
Db      10 GCGGGCGGC 2

RESULT 489
ABL42679/c
ID ABL42679 standard; DNA; 10 BP.
XX
XX ABL42679;
XX
XX 15-JUL-2002 (first entry)
XX
XX Human G protein-coupled receptor 7 allele-specific primer #11.
XX
XX Human; G protein-coupled receptor 7; GPR7; haplotyping; SNP;
XX psychological disorder; neurological disorder; primer; PCR; ss;
XX single nucleotide polymorphism.
XX
XX Homo sapiens.
XX
XX WO200222644-A1.
XX
XX 21-MAR-2002.
XX
XX 17-SEP-2001; 2001WO-US029207.
XX
XX 15-SEP-2000; 2000US-0232900P.
XX
XX (GENA-) GENAISANCE PHARM INC.
XX
XX Koshy B, Sanchis A, Tirrell C;
XX WPI; 2002-383121/41.
XX
XX Novel genetic variants of G protein-coupled receptor 7 gene useful for
XX therapeutic purposes and for expressing GPR7 protein useful in
XX identifying drugs to treat psychological and neurological disorders.
XX
XX Claim 18; Page 13; 69pp; English.

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```

QY      3 GCGGGCGGC 11
Db      9 GCGGGCGGC 1

RESULT 487
ABL42839
ID ABL42839 standard; cDNA; 10 BP.
XX
XX
XX ABL42839;
XX
XX 12-APR-2002 (first entry)
XX
XX Human maturation/activation dendritic cell expression gene tag #213.
XX
XX Human; maturation/activation dendritic cell expression gene; tag;
XX maturation; activation; dendritic cell; ss.
XX
XX Homo sapiens.
XX
XX JP2001327293-A.
XX
XX 27-NOV-2001.
XX
XX 22-MAY-2000; 2000JP-00150562.
XX
XX 22-MAY-2000; 2000JP-00150562.
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2002-127070/17.
XX
XX Human maturation/activation dendritic cell expression gene group.
XX
XX Claim 19; Page 15; 41pp; Japanese.
XX
XX The present invention describes a human maturation/activation dendritic
XX cell (DC) expression gene group consisting of 100 genes which show the
XX highest expression among the genes expressed in human maturation/
XX activation DC. Also described are: (1) a protein expressed by the above
XX human maturation/activation DC expression gene; (2) an antibody against
XX the protein; and (3) an antagonist against the expression of each gene
XX belonging to the above gene group. The gene group is useful for the
XX treatment and the diagnosis of various human diseases related to human
XX DC. ABL42627 to ABL42926 represent specifically claimed human
XX maturation/activation DC expression gene tags from the present invention
XX
XX Sequence 10 BP; 1 A; 4 C; 5 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 CGCGGGCGC 9
Db      2 CGACGGCGC 10

RESULT 488
ABL42679/c
ID ABL42679 standard; cDNA; 10 BP.
XX
XX ABL42679;
XX
XX 12-APR-2002 (first entry)
XX
XX Human maturation/activation dendritic cell expression gene tag #53.
XX
XX Human; maturation/activation dendritic cell expression gene; tag;
XX maturation; activation; dendritic cell; ss.
XX
XX Homo sapiens.

```

XX The invention relates to an isolated polynucleotide (I) comprising a
 CC nucleotide sequence which is a polymorphic variant of a reference
 CC sequence for G-protein coupled receptor 7 (GPR7) gene or its fragment, or
 CC a polymorphic variant of a reference sequence for a GPR7 cDNA or its
 CC fragment. The encoded polypeptide (II) is useful for screening for drugs
 CC targeting the polypeptide. (I) is useful for identifying an association
 CC between a trait such as a clinical response to a drug targeting GPR7 and
 CC a haplotype or haplotype pair of GPR7 gene. Such methods have
 CC applicability in developing diagnostic tests and therapeutic treatments
 CC psychological and neurological disorders. (I) is useful for studying the
 CC expression and function of GPR7 and expressing GPR7 protein for use in
 CC screening for candidate drugs to treat diseases related to GPR7 activity.
 CC The polymorphism and haplotype data are useful for validating whether
 CC GPR7 is a suitable target for drugs to treat psychological and
 CC neurological disorders, screening for such drugs and reducing bias in
 CC clinical trials of such drugs. (I) is useful for therapeutic purposes.
 CC Establishing the GPR7 haplotype or haplotype pair of an individual is
 CC useful for improving the efficiency and reliability of several steps in
 CC the discovery and development of drugs for treating diseases associated
 CC with GPR7 activity psychological and neurological disorders. The
 CC haplotyping method is useful to validate GPR7 as a candidate target for
 CC treating a specific condition or disease predicted to be associated with
 CC GPR7 activity. The method is also useful in screening for compounds
 CC targeting GPR7 to treat a specific condition or disease predicted to be
 CC associated with GPR7 activity, e.g. detecting which of the GPR7
 CC haplotypes or haplotype pairs present in individual members of a
 CC population with the specific disease of interest enables one to screen
 CC for compounds that display the highest desired agonist or antagonist
 CC activity for each of the most frequent GPR7 isoforms present in the
 CC disease population. A polymorphic variant of GPR7 is useful in studying
 CC the effect of the variation on the biological activity of GPR7, on the
 CC binding affinity of candidate drugs targeting GPR7 for the treatment of
 CC psychological and neurological disorders and in assays to measure the
 CC binding affinities of one or more candidate drugs targeting the GPR7
 CC protein. (I) is useful for studying expression of the GPR7 isoforms in
 CC vivo, for in vivo screening and testing of drugs against GPR7 protein and
 CC for testing the efficacy of therapeutic agents and compounds for
 CC psychological and neurological disorders in a biological system. Antibody
 CC to (II) is useful for diagnostic and prognostic formats and therapeutic
 CC methods, for immunoprecipitating (II) from solution, for detecting GPR7
 CC protein isoforms in biological samples, frozen tissue sections, cells
 CC which have been fixed or unfixed and prepared on slides, for use in
 CC immunocytochemical, immunohistochemical and immunofluorescence
 CC techniques. ABLK70517-ABK70558 represent human GPR7 allele-specific probes
 CC and primers used in haplotyping of human GPR7 as described in the
 CC invention
 XX
 SQ Sequence 10 BP; 1 A; 5 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGGCGGC 11
 Db |||||
 9 GCGGTCGC 1

RESULT 490
 ABL60208
 ID ABL60208 standard; DNA; 10 BP.
 XX
 AC ABL60208;
 XX
 DT 22-JUL-2002 (first entry)
 XX
 DE Human MUC1 PCR primer SEQ ID NO 52.
 XX
 KW Human; mucin 1; MUC1; transmembrane protein; SNP; cancer; cytostatic;
 KW single nucleotide polymorphism; haplotyping; genotyping; drug;
 XX antinflammatory; PCR; primer; ss.

OS Homo sapiens.
 XX WO200226765-A2.
 PN
 XX
 PD 04-APR-2002.
 XX
 PF 25-SEP-2001; 2001WO-US030151.
 XX
 PR 28-SEP-2000; 2000US-0236113P.
 XX
 PA (GENA-) GENAISANCE PHARM INC.
 XX
 PI Chew A, Koshy B;
 XX WPI; 2002-405042/43.
 DR
 XX New genetic variants of mucin 1, Transmembrane gene, useful in studying
 PT expression and function of protein encoded by the gene and for screening
 PT drugs to treat diseases e.g. cancer.
 XX
 PS Claim 16; Page 14; 75pp; English.
 XX
 CC The invention relates to a polynucleotide (ABL60158, ABL60159) encoding
 CC mucin 1/MUC1 (AB077476), Transmembrane isogene. The invention describes
 CC novel genetic variants of the MUC1 gene. The invention is useful for
 CC haplotyping/genotyping the MUC1 gene in an individual and identifying an
 CC association between a trait and at least one of the haplotypes or
 CC haplotype pairs of MUC1 gene. MUC1 is useful for studying the expression
 CC and function of MUC1 and expressing MUC1 protein for use in screening for
 CC candidate drugs to treat diseases related to MUC1 activity and in
 CC studying the effect of the variation on the biological activity of MUC1
 CC as well as on the binding affinity of candidate drugs targeting MUC1 for
 CC the treatment of e.g. cancer. MUC1 is further used by the pharmaceutical
 CC research scientist to validate MUC1 as a candidate target for and in
 CC design of clinical trials of candidate drugs for, treating a specific
 CC condition drugs or disease predicted to be associated with MUC1 activity.
 CC MUC1 antibodies are useful in a variety of diagnostic and prognostic
 CC formats and therapeutic methods. The present sequence is that of a PCR
 CC primer for detecting MUC1 polymorphisms, useful to the invention
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 5 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGGCGGC 11
 Db |||||
 2 GCGGGCGGC 10
 RESULT 491
 AAD26185
 ID AAD26185 standard; DNA; 10 BP.
 XX
 AC AAD26185;
 XX
 DT 26-MAR-2002 (first entry)
 XX
 DE Human endothelin 2 (EDN2) gene polymorphism detecting primer #24.
 XX
 KW Human; endothelin 2; EDN2; polymorphic site; PS; therapy; hypertension;
 KW drug screening; cardiovascular disorder; renal insufficiency; ASO;
 KW allele specific oligonucleotide; cerebroprotective; polymorphism;
 KW hypotensive; cerebrovascular condition; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200190118-A2.
 XX
 PD 29-NOV-2001.
 XX
 PF 21-MAY-2001; 2001WO-US016433.

```

XX 19-MAY-2000; 2000US-0205761P.
XX (GENA-) GENAISSANCE PHARM INC.
XX Kazemi A, Koshy B, Tanguay DA;
XX WPI; 2002-083075/11.
XX
XX New human endothelin 2 (EDN2) polymorphic variants and encoding genes,
XX useful in expressing EDN2 protein for screening candidate drugs to treat
XX diseases related to EDN2 activity.
XX
XX Claim 18; Page 15; 91pp; English.
XX
XX The invention relates to genetic variants of human endothelin 2 (EDN2)
XX gene. EDN2 gene contains 17 polymorphic sites PS1-PS17. The polymorphic
XX variants are useful in studying the expression and function of EDN2, in
XX expressing EDN2 protein for use in screening for candidate drugs to treat
XX diseases related to EDN2 activity, in studying the effect of the
XX variation on the biological activity of EDN2, and the binding affinity of
XX candidate drugs targeting EDN2 for the treatment of hypertension,
XX cardiovascular disorders, renal insufficiency and cerebrovascular
XX conditions. The haplotyping methods are useful in validating EDN2 as a
XX candidate target for treating a specific condition or disease predicted
XX to be associated with EDN2 activity, or in the design of clinical trials
XX of candidate drugs for treating a specific condition or disease
XX associated with EDN2 activity. Allele specific oligonucleotides (ASO) are
XX used as probes and primers, and for detecting polymorphism in EDN2 gene.
XX The present sequence is a primer used to detect polymorphism in human
XX EDN2 gene
XX
XX Sequence 10 BP; 1 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2 GCGCGGCGG 10
XX |||||
XX Db 2 GCGCGGCGAG 10
XX
XX
XX RESULT 492
XX ABL39511
XX ID ABL39511 standard; DNA; 10 BP.
XX
XX AC ABL39511;
XX
XX DT 22-APR-2002 (first entry)
XX
XX DE Human ETRF primer-extension oligonucleotide 17.
XX
XX KW Human; electron-transfer flavoprotein beta polypeptide; ETRF;
XX electron acceptor; mitochondrial matrix; glutaric acidemia type II;
XX novel polymorphic site; novel polymorphism; ETRF genotype; ss; GAI;
XX ETRF haplotype; transgenic animal; primer; probe; chromosome 19q13;
XX primer-extension oligonucleotide; single nucleotide polymorphism; SNP.
XX
XX OS Homo sapiens.
XX
XX PN WO200202580-A2.
XX
XX PD 10-JAN-2002.
XX
XX PF 05-JUL-2001; 2001WO-US021306.
XX
XX PR 05-JUL-2000; 2000US-0215984P.
XX
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Bentivegna SC, Blegiecki KM, Kazemi A, Koshy B;
XX

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DR WPI; 2002-154722/20.
XX
XX Novel isolated human electron-transfer-flavoprotein, beta polynucleotide,
XX useful for therapeutic purposes, for studying the expression and function
XX of the polynucleotide, and for expressing the flavoprotein.
XX
XX Claim 19; Page 15; 143pp; English.
XX
XX The invention comprises DNA, cDNA and protein sequences of the human
XX electron-transfer flavoprotein, beta polypeptide (ETFB) gene (located on
XX chromosome 19q13.3-13.4). The invention specifically relates to the
XX identification of 27 novel polymorphic sites within the ETFB gene.
XX Electron-transfer flavoprotein (ETF) is an obligatory electron acceptor
XX for nine primary flavoprotein dehydrogenases and is located in the
XX mitochondrial matrix. ETF is composed of an alpha (ETFA) and a beta
XX (ETFB) subunit. Electrons accepted by ETF are transferred to the
XX mitochondrial respiratory chain by ETF dehydrogenases (ETFDHs).
XX Deficiency of ETF or ETFDH leads to glutaric acidemia type II (GAI).
XX Therefore ETFB is a pharmaceutically-important gene in the treatment of
XX GAI. The novel ETFB polymorphisms identified in the invention are useful
XX for genotyping and haplotyping the ETFB gene of an individual. The ETFB
XX protein and nucleic acids of the invention are useful for studying the
XX expression and function of ETFB in vivo. The ETFB protein and nucleic
XX acids are also useful for testing the efficacy of therapeutic agents and
XX compounds for glutaric acidemia type II. The nucleic acids of the
XX invention are useful in the production of a transgenic animal expressing
XX the ETFB gene. Nucleic acids ABL39414-ABL39440 represent claimed ETFB
XX allele-specific probes. Nucleic acids ABL39441-ABL39494 represent claimed
XX ETFB allele-specific PCR primers. Nucleic acids ABL39495-ABL39548
XX represent claimed ETFB primer-extension oligonucleotides
XX
XX Sequence 10 BP; 0 A; 2 C; 8 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 46.3%; Score 7.4; DB 1; Length 10;
XX Best Local Similarity 88.9%; Pred. No. 2.8e+02;
XX Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3 GCGGGCGGC 11
XX |||||
XX Db 1 GCGGGGGGC 9
XX
XX
XX RESULT 493
XX ABQ71550
XX ID ABQ71550 standard; DNA; 10 BP.
XX
XX AC ABQ71550;
XX
XX DT 28-AUG-2002 (first entry)
XX
XX DE Zinc finger protein related oligonucleotide target SEQ ID NO:1284.
XX
XX KW Zinc finger protein; ZFP; DNA binding protein; zinc finger; ss.
XX
XX OS Homo sapiens.
XX
XX OS Synthetic.
XX
XX PN WO200242459-A2.
XX
XX PD 30-MAY-2002.
XX
XX PF 20-NOV-2001; 2001WO-US043438.
XX
XX PR 20-NOV-2000; 2000US-00716637.
XX
XX (SANG-) SANGAMO BIOSCIENCES INC.
XX
XX Liu Q;
XX
XX WPI; 2002-500284/53.
XX
XX New zinc finger protein that binds to target site, useful in studying
XX gene function and for human therapeutics and plant engineering, comprises
XX

```

PT first, second and third zinc fingers, ordered from N- to C-terminus.
 XX
 PS Example 1; Page 47; 81pp; English.

XX The present invention describes a zinc finger protein (I) that binds to a
 CC target site, comprising a first (F1), a second (F2), and a third (F3)
 CC zinc finger, ordered F1, F2, F3 from N-terminus to C-terminus, where the
 CC target site comprises, in 3'-5' direction, a first (S1), a second (S2),
 CC and a third (S3) target subsite. Also described are: (1) a polypeptide
 CC (II) comprising (I); (2) a polynucleotide (III) encoding (I) or (II); and
 CC (3) designing (W) (I) involves selecting the F1 zinc finger such that it
 CC binds to the S1 target subsite, selecting the F2 zinc finger such that it
 CC binds to the S2 target subsite, and selecting the F3 zinc finger such
 CC that it binds to the S3 target subsite, thus designing (I) that binds to
 CC a target site. (I) is useful for recognition of triplet target subsites
 CC having the nucleotide G in the 5'-most position of the subsite. (I) is
 CC useful in studying gene function, and for human therapeutics and plant
 CC engineering. (1), (II) or (III) is useful in therapeutic methods to
 CC modulate the expression of a target region within a subject, in
 CC diagnostic methods for sequence specific detection of target nucleic acid
 CC in a sample, and in assays to determine the phenotype and function of
 CC gene expression. (I) has improved affinity and specificity for their
 CC target sequences, as well as enhanced biological activity. ABQ71213 to
 CC ABQ72214 and ABP48191 to ABP51230 represent DNA target sequences and zinc
 CC finger peptides which are given in the exemplification of the present
 CC invention

XX Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 7 GCGGCGTCG 15
 Db 1 GCGGCGTCG 9

RESULT 494

ABQ8691/C
 ID ABQ8691 standard; DNA; 10 BP.

AC ABQ8691;

XX 23-SEP-2002 (first entry)

DE Human CFL1 primer extension oligonucleotide #14.

KW Human; cofillin 1; CFL1; gene therapy; antisense gene therapy;
 KW immunological disorder; primer extension; PCR; primer; probe; ss.

OS Homo sapiens.

XX WO200194376-A1.

PN 13-DEC-2001.

XX 11-JUN-2001; 2001WO-US018815.

XX 09-JUN-2000; 2000US-0210884P.

XX (GENA-) GENAISANCE PHARM INC.

XX Anastasio AE, Duda A, Kliem SE, Koshy B, Sausker EA;

XX WPI; 2002-566437/60.

XX Novel genetic variants of human cofillin 1, CFL1 gene for studying
 PT expression, function of the gene and expressing CFL1 protein useful in
 PT identifying drugs to treat immunological disorders.

XX Claim 19; Page 13; 84pp; English.

XX

CC The invention relates to a novel polynucleotide sequence which is a
 CC polymorphic variant of a reference sequence for the cofillin 1 (non-
 CC muscle) (CFL1) gene or its fragment, or a polymorphic variant of a
 CC reference sequence for a CFL1 cDNA or its fragment. The polynucleotide of
 CC the invention may have a use in gene therapy, and in antisense gene
 CC therapy. The polynucleotide is useful for studying the expression and
 CC function of CFL1 and expressing CFL1 protein for use in screening for
 CC candidate drugs to treat diseases related to CFL1 activity. The
 CC polymorphism and haplotype data are useful for validating whether CFL1 is
 CC a suitable target for drugs to treat immunological disorders, screening
 CC for such drugs and reducing bias in clinical trials of such drugs. The
 CC present sequence represents one of a set of primer extension
 CC oligonucleotide PCR primers used in the invention to detect polymorphisms
 CC in the CFL1 gene

XX Sequence 10 BP; 1 A; 7 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 GCGCGGCAT 13

Db 10 GCGCGGCAT 2

RESULT 495

ABN80652/C

ID ABN80652 standard; DNA; 10 BP.

AC ABN80652;

XX 19-JUL-2002 (first entry)

DE Human P450(cytochrome) oxidoreductase ASO primer extension oligo #40.

XX Human; P450(cytochrome) oxidoreductase; POR; cancer; haplotype; SNP;
 KW single nucleotide polymorphism; flavoprotein; enzyme;
 KW primer extension oligonucleotide; ss.

OS Homo sapiens.

XX WO200226768-A2.

XX 04-APR-2002.

XX 01-OCT-2001; 2001WO-US030877.

XX 29-SEP-2000; 2000US-0236449P.

XX (GENA-) GENAISANCE PHARM INC.

XX Kazemi A, Kliem SE, Lanz EM, Messer C, Tanguay DA;

XX WPI; 2002-394236/42.

XX New genetic variants comprising haplotypes of the P450 (cytochrome)
 PT oxidoreductase (POR) isogene, useful in improving the efficiency of drug
 PT screening protocols for compounds targeting POR.

XX Claim 16; Page 15; 141pp; English.

XX The present invention provides the protein, gene and cDNA sequences of
 CC human P450(cytochrome) oxidoreductase POR, and single nucleotide
 CC polymorphisms (SNPs) identified therein. The sequences can be used to
 CC haplotype the POR gene of an individual, and to establish whether POR is
 CC a suitable target for drugs to treat cancer and disorders associated with
 CC impaired protein synthesis in cells. The present sequence is an allele
 CC specific primer extension oligonucleotide for the coding sequences of the
 CC invention

XX Sequence 10 BP; 1 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

```
Query Match          46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      6 GCGCGCATC 14
      ||| |||||
DB      10 GCGCGCATC 2

RESULT 496
ABN87961/c
ID  ABN87961 standard; DNA; 10 BP.
XX
AC  ABN87961;
XX
DT  12-AUG-2002 (first entry)
XX
DE  Human GSR preferred oligonucleotide detection primer SEQ ID NO:80.
XX
KW  Human; glutathione reductase; GSR; enzyme; haemolytic anaemia;
KW  gene therapy; antianaemic; primer; ss.
XX
OS  Homo sapiens.
XX
PN  WO200242320-A2.
XX
PD  30-MAY-2002.
XX
PF  13-NOV-2001; 2001WO-US046473.
XX
PR  10-NOV-2000; 2000US-0247202P.
XX
PA  (GENA-) GENAISSANCE PHARM INC.
XX
PI  Bieglecki KM, Sanchis A, Sausker EA, Sun X;
XX  WPI; 2002-471719/50.
DR
XX
XX  New genetic variants of Glutathione reductase isogenes, useful for
PT  improving efficiency and reliability in drug development for treating
PT  hemolytic anemia.
XX
PS  Claim 16; Page 15; 137pp; English.
XX
CC  The present invention describes genetic variants of the human glutathione
CC  reductase (GSR) gene (I). (I) has antianaemic activity and can be used in
CC  gene therapy. (I) can be used in screening for drugs targeting (I) that
CC  are useful for treating haemolytic anaemia. Methods from the present
CC  invention can be used; for improving the efficiency and reliability of
CC  several steps in the discovery and development of drugs for treating
CC  diseases associated with GSR activity; for haplotyping, which is also
CC  used by the pharmaceutical research scientist to validate GSR as a
CC  candidate target for treating a specific condition or disease predicted
CC  to be associated with GSR activity, e.g. haemolytic anaemia, and in the
CC  design of clinical trials for treating a specific condition of disease
CC  associated with GSR activity; and for screening compounds targeting GSR.
CC  (I) is useful in studying the expression and function of GSR, and in
CC  expressing GSR protein for use in screening for candidate drugs to treat
CC  diseases related to GSR activity. (I) is also useful in studying the
CC  effect of the variation on the biological activity of GSR as well as on
CC  the binding affinity of candidate drugs targeting GSR for the treatment
CC  of haemolytic anaemia. The present sequence represents a preferred
CC  oligonucleotide detection primer for the human GSR gene, which is given
CC  in the exemplification of the present invention
XX
SQ  Sequence 10 BP; 1 A; 6 C; 3 G; 0 T; 0 U; 0 Other;

Query Match          46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGCGGC 11
      || |||||
DB

RESULT 498
ABV78320/c
ID  ABV78320 standard; cDNA; 10 BP.
XX
AC  ABV78320;
XX
DT  29-NOV-2002 (first entry)
XX
DE  Human ribosomal protein L35 SAGE tag, SEQ ID NO:31.
XX
KW  SAGE tag; serial analysis of gene expression; human; Th1 cell;
```

```
DB      10 GCTGCGGC 2

RESULT 497
ABV78361/c
ID  ABV78361 standard; cDNA; 10 BP.
XX
AC  ABV78361;
XX
DT  29-NOV-2002 (first entry)
XX
DE  Human ribosomal protein L35 SAGE tag, SEQ ID NO:72.
XX
KW  SAGE tag; serial analysis of gene expression; human; Th2 cell;
KW  activated T cell; T lymphocyte; immune response; expression pattern;
KW  immune disorder; ss.
XX
OS  Homo sapiens.
XX
PN  JP2002186482-A.
XX
PD  02-JUL-2002.
XX
PF  19-DEC-2000; 2000JP-00385816.
XX
PR  19-DEC-2000; 2000JP-00385816.
XX
PA  (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR  WPI; 2002-594261/64.
XX
PT  Human activated Th1 and Th2 cell expression gene group, useful for the
PT  diagnosis and treatment of Th1 and Th2-related diseases.
XX
PS  Claim 10; Page 9; 60pp; Japanese.
XX
CC  The invention relates to SAGE (serial analysis of gene expression) tags
CC  representing groups of genes which are expressed in activated human Th1
CC  and/or Th2 cells. The SAGE tags of this invention consist of a sequence
CC  of 10 nucleotides located downstream of the 5'-CATG-3' sequence motif
CC  lying nearest to the polyA region of cDNAs derived from a variety of
CC  genes. These tags serve to uniquely identify each transcript and can thus
CC  be used to analyse the pattern of gene expression in particular cell
CC  types. The invention also relates to proteins encoded by the genes
CC  expressed in Th1 and/or Th2 cells, antibodies against these proteins, and
CC  inhibitors of the expression of groups of genes that are expressed in
CC  either or both the two cell types. Groups of genes expressed in Th1
CC  and/or Th2 cell types may be used for the diagnosis and treatment of Th1
CC  and Th2-related disorders. Sequences ABV78340-ABV78389 are SAGE tags
CC  representing 50 genes which are most highly expressed in Th2 cells
XX
SQ  Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match          46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 GCGGCGGC 11
      || |||||
DB      10 GCGGCGGC 2

RESULT 498
ABV78320/c
ID  ABV78320 standard; cDNA; 10 BP.
XX
AC  ABV78320;
XX
DT  29-NOV-2002 (first entry)
XX
DE  Human ribosomal protein L35 SAGE tag, SEQ ID NO:31.
XX
KW  SAGE tag; serial analysis of gene expression; human; Th1 cell;
```


KW activated T cell; T lymphocyte; immune response; expression pattern;
 KW immune disorder; ss.
 XX Homo sapiens.
 XX JP2002186482-A.
 PN
 XX
 XX 02-JUL-2002.
 PD
 XX
 XX 19-DEC-2000; 2000JP-00385816.
 PF
 XX
 XX 19-DEC-2000; 2000JP-00385816.
 PR
 XX
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 PA
 XX
 XX WPI; 2002-594261/64.
 DR
 XX
 XX Human activated Th1 and Th2 cell expression gene group, useful for the
 PT diagnosis and treatment of Th1 and Th2-related diseases.
 PT
 XX
 XX Claim 1; Page 8; 60pp; Japanese.
 PS
 XX
 CC The invention relates to SAGE (serial analysis of gene expression) tags
 CC representing groups of genes which are expressed in activated human Th1
 CC and/or Th2 cells. The SAGE tags of this invention consist of a sequence
 CC of 10 nucleotides located downstream of the 5'-CATG-3' sequence motif
 CC lying nearest to the polyA region of cDNAs derived from a variety of
 CC genes. These tags serve to uniquely identify each transcript and can thus
 CC be used to analyse the pattern of gene expression in particular cell
 CC types. The invention also relates to proteins encoded by the genes
 CC expressed in Th1 and/or Th2 cells, antibodies against these proteins, and
 CC inhibitors of the expression of groups of genes that are expressed in
 CC either or both the two cell types. Groups of genes expressed in Th1
 CC and/or Th2 cell types may be used for the diagnosis and treatment of Th1
 CC and Th2-related disorders. Sequences ABV78290-ABV78339 are SAGE tags
 CC representing 50 genes which are most highly expressed in Th1 cells
 CC
 XX
 SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGGCGGC 11
 || |||||
 DB 10 GCCGGCGGC 2
 RESULT 499
 ABV84846/c
 ID ABV84846 standard; cDNA; 10 BP.
 XX
 AC ABV84846;
 XX
 XX 12-DEC-2002 (first entry)
 DT
 XX
 XX Human ribosomal protein L35 SAGE tag #656.
 DE
 XX
 KW SAGE tag; serial analysis of gene expression; human; chronic hepatitis C;
 KW CH; liver tissue; hepatocellular carcinoma; cancer; tumour; HCC;
 KW expression pattern; ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX JP2002209591-A.
 PN
 XX
 XX 30-JUL-2002.
 PD
 XX
 XX 19-JAN-2001; 2001JP-00012328.
 PF
 XX
 XX 19-JAN-2001; 2001JP-00012328.
 PR
 XX
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 PA

XX
 DR WPI; 2002-631294/68.
 XX
 XX Human chronic hepatitis C tissue expression exasperating gene group
 PT comprises 100 high-ranking genes.
 PT
 XX
 XX Claim 55; Page 29; 139pp; Japanese.
 PS
 XX
 CC The invention relates to SAGE (serial analysis of gene expression) tags
 CC representing groups of genes which are differentially expressed in human
 CC chronic hepatitis C (CH) liver tissue or hepatitis C-induced
 CC hepatocellular carcinoma (HCC) compared with normal human liver tissue.
 CC The SAGE tags of this invention consist of a sequence of 10 nucleotides
 CC located downstream of the 5'-CATG-3' sequence motif lying nearest to the
 CC polyA region of cDNAs derived from a variety of genes. These tags serve
 CC to uniquely identify each transcript and can thus be used to analyse the
 CC pattern of gene expression in particular cell types. The invention also
 CC relates to proteins encoded by the genes expressed in chronic hepatitis C
 CC liver tissue or HCC, antibodies against these proteins, and inhibitors of
 CC the expression of groups of genes that are overexpressed in chronic
 CC hepatitis C liver tissue or HCC. Groups of genes differentially expressed
 CC in chronic hepatitis C tissue or HCC may be used for the diagnosis and
 CC treatment of these diseases. Such genes, inhibitors of their expression
 CC or activity, and antibodies against the gene products may be used in the
 CC development of drugs to treat chronic hepatitis C and/or HCC. Sequences
 CC ABV84791-ABV84890 are SAGE tags representing 100 genes which are highly
 CC expressed in chronic hepatitis C liver tissue
 CC
 XX
 SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGGCGGC 11
 || |||||
 DB 10 GCCGGCGGC 2
 RESULT 500
 ABV84871
 ID ABV84871 standard; cDNA; 10 BP.
 XX
 AC ABV84871;
 XX
 XX 12-DEC-2002 (first entry)
 DT
 XX
 XX Human chronic hepatitis C tissue highly expressed gene SAGE tag #681.
 DE
 XX
 KW SAGE tag; serial analysis of gene expression; human; chronic hepatitis C;
 KW CH; liver tissue; hepatocellular carcinoma; cancer; tumour; HCC;
 KW expression pattern; ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX JP2002209591-A.
 PN
 XX
 XX 30-JUL-2002.
 PD
 XX
 XX 19-JAN-2001; 2001JP-00012328.
 PF
 XX
 XX 19-JAN-2001; 2001JP-00012328.
 PR
 XX
 XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
 PA
 XX
 XX WPI; 2002-631294/68.
 DR
 XX
 XX Human chronic hepatitis C tissue expression exasperating gene group
 PT comprises 100 high-ranking genes.
 PT
 XX
 XX Claim 55; Page 29; 139pp; Japanese.
 PS
 XX
 CC The invention relates to SAGE (serial analysis of gene expression) tags

CC identities are defined in the specification (PS2-PS6, PS8 and PS10-PS17),
 CC or a second nucleotide sequence (NS2) complementary to NS1.
 CC Alternatively, the sequence comprises a coding sequence for an IL6
 CC isogene. Also included are methods of haplotyping/ genotyping (and
 CC predicting the haplotype/genotype) of the IL6 gene of an individual,
 CC identifying an association between a trait and at least one haplotype or
 CC haplotype pair of the IL6 gene, an isolated oligonucleotide for detecting
 CC a polymorphism in the IL6 gene, a recombinant non-human organism (III)
 CC transformed or transfected with the IL6 polynucleotide, an isolated
 CC fragment of the IL6 isogene comprising at least 10 and containing one of
 CC the identified single- nucleotide polymorphisms (SNP), an isolated
 CC polypeptide (or fragment) comprising an amino acid sequence which is a
 CC polymorphic variant of IL6, an isolated monoclonal antibody specific for
 CC IL6, a computer system for storing and analysing polymorphism data for
 CC the IL6 gene, and a genome anthology for the IL6 gene. The IL6
 CC polymorphic variant is useful in screening for drugs targeting IL6 that
 CC are useful for treating myeloma, coronary artery disease (CAD),
 CC arthritis, Kaposi sarcoma (associated with human immunodeficiency virus
 CC infection, HIV), hypercalcaemia, bone disease, inflammatory disease,
 CC stunted growth and systemic onset juvenile chronic arthritis. The methods
 CC are useful for improving the efficiency and reliability in the discovery
 CC and development of drugs and in the validation of IL6 as a drug target.
 CC The antibody is useful in diagnostic, prognostic and therapeutic methods.
 CC The IL6 isogene is useful in studying the expression and function of IL6,
 CC and in expressing IL6 protein for use in screening for candidate drugs.
 CC The gene for IL6 is located on chromosome 7p21-p15. The present sequence
 CC is the 3' terminus of an allele specific primer used to detect an IL6
 CC polymorphism using the method of primer extension
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. NO. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGGCAGTC 14
 | | | | |
 DB 10 GACGGCAGTC 2

RESULT 503
 ABN88030/c
 ID ABN88030 standard; DNA; 10 BP.
 AC ABN88030;
 XX
 XX
 DT 12-AUG-2002 (first entry)
 XX
 XX Human SCYB14 preferred oligonucleotide detection primer SEQ ID NO:29.
 DE
 XX Human; small inducible cytokine subfamily B member 14; SCYB14; SNP;
 KW single nucleotide polymorphism; polymorphic; platelet aggregation;
 KW antiinflammatory; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200229108-A1.
 PN
 XX
 PD 11-APR-2002.
 XX
 XX 04-OCT-2001; 2001WO-US031303.
 PF
 XX
 PR 04-OCT-2000; 2000US-0238101P.
 XX
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 XX Choi JY, Kazemi A, Russo DP, Sausker EA;
 PI
 XX WPI; 2002-315864/35.
 DR
 XX

PT New small inducible cytokine subfamily B (Cys-X-Cys), Member 14 (SCYB14)
 PT gene polymorphic variants, for studying the expression and function of
 PT SCYB14 and screening candidate drugs for treating disorders involving

PT inflammatory responses.
 XX
 PS Claim 17; Page 14; 73pp; English.
 XX
 CC The present invention describes genetic variants of the human small
 CC inducible cytokine subfamily B (Cys-X-Cys), Member 14 (BRAX) (SCYB14)
 CC gene. SCYB14 sequences have antiinflammatory activity. The polymorphic
 CC variants are useful in studying the expression and function of SCYB14, in
 CC expressing SCYB14 protein for use in screening for candidate drugs to
 CC treat diseases related to SCYB14 activity, in studying the effect of the
 CC variation on the biological activity of SCYB14, and the binding affinity
 CC of candidate drugs targeting SCYB14 for the treatment of disorders
 CC involving inflammatory responses. Haplotyping methods from the present
 CC invention are useful in validating SCYB14 as a candidate target for
 CC treating a specific condition or disease predicted to be associated with
 CC SCYB14 activity, or in the design of clinical trials of candidate drugs
 CC for treating a specific condition or disease associated with SCYB14
 CC activity. Transgenic animals are useful for studying expression of the
 CC SCYB14 isogenes in vivo, for in vivo screening and testing of drugs
 CC targeted against SCYB14 protein, and for testing the efficacy of
 CC therapeutic agents and compounds for disorders related to platelet
 CC aggregation in a biological system. The present sequence represents a
 CC preferred oligonucleotide detection primer for the human SCYB14 gene
 XX
 SQ Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. NO. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGC 11
 | | | | |
 DB 10 GCGGGCGGC 2

RESULT 504
 ABN88032/c
 ID ABN88032 standard; DNA; 10 BP.
 AC ABN88032;
 XX
 XX
 DT 12-AUG-2002 (first entry)
 XX
 XX Human SCYB14 preferred oligonucleotide detection primer SEQ ID NO:31.
 DE
 XX Human; small inducible cytokine subfamily B member 14; SCYB14; SNP;
 KW single nucleotide polymorphism; polymorphic; platelet aggregation;
 KW antiinflammatory; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200229108-A1.
 PN
 XX
 PD 11-APR-2002.
 XX
 XX 04-OCT-2001; 2001WO-US031303.
 PF
 XX
 PR 04-OCT-2000; 2000US-0238101P.
 XX
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 XX Choi JY, Kazemi A, Russo DP, Sausker EA;
 PI
 XX WPI; 2002-315864/35.
 DR
 XX
 XX New small inducible cytokine subfamily B (Cys-X-Cys), Member 14 (SCYB14)
 XX gene polymorphic variants, for studying the expression and function of
 XX SCYB14 and screening candidate drugs for treating disorders involving
 XX inflammatory responses.
 XX
 PS Claim 17; Page 14; 73pp; English.
 XX
 CC The present invention describes genetic variants of the human small

CC inducible cytokine subfamily B (Cys-X-Cys), Member 14 (BRAK) (SCVB14)
 CC gene. SCVB14 sequences have antiinflammatory activity. The polymorphic
 CC variants are useful in studying the expression and function of SCVB14, in
 CC expressing SCVB14 protein for use in screening for candidate drugs to
 CC treat diseases related to SCVB14 activity, in studying the effect of the
 CC variation on the biological activity of SCVB14, and the binding affinity
 CC of candidate drugs targeting SCVB14 for the treatment of disorders
 CC involving inflammatory responses. Haplotyping methods from the present
 CC invention are useful in validating SCVB14 as a candidate target for
 CC treating a specific condition or disease predicted to be associated with
 CC SCVB14 activity, or in the design of clinical trials of candidate drugs
 CC for treating a specific condition or disease associated with SCVB14
 CC activity. Transgenic animals are useful for studying expression of the
 CC SCVB14 isogene in vivo, for in vivo screening and testing of drugs
 CC targeted against SCVB14 protein, and for testing the efficacy of
 CC therapeutic agents and compounds for disorders related to platelet
 CC aggregation in a biological system. The present sequence represents a
 CC preferred oligonucleotide detection primer for the human SCVB14 gene
 XX
 SQ Sequence 10 BP; 1 A; 7 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGG 10

DB 10 GGCGGGCTG 2

RESULT 505

ABK30047

ID ABK30047 standard; DNA; 10 BP.

AC ABK30047;

XX 23-APR-2002 (first entry)

DE Vancomycin-resistant enterococci, VanH promoter mutant M5.

XX Cyclin D1 promoter; CD40L promoter; hepatitis B virus promoter;
 KW HBV promoter; vancomycin-resistant enterococci promoter; VRE promoter;
 KW vanH promoter; androgen receptor promoter; AR promoter;
 KW human epidermal growth factor receptor 2 promoter; her2 promoter;
 KW beta lactamase promoter; Bla promoter; transgene; cancer; breast cancer;
 KW colon cancer; immunological disorder; prostate cancer; cytostatic;
 KW autoimmune disease; HBV pre-S promoter; HBV-X promoter;
 KW enterococcus infection; immunosuppressive; antibacterial; antiviral;
 KW gene expression modulator; multiple sclerosis; MS;
 KW chronic hepatic insufficiency; cirrhosis; hepatocellular carcinoma;
 KW systemic lupus erythematosus; SLE; graft-vs-host disease; GVHD;
 KW familial adenomatous polyposis; rheumatoid arthritis; PCR; primer;
 KW mutant; transgenic; ds.

OS Enterococcus sp.

XX WO200194600-A2.

PN 13-DEC-2001.

XX 06-JUN-2001; 2001WO-US018343.

XX 06-JUN-2000; 2000US-0209549P.

XX (GENE-) GENELABS TECHNOLOGIES INC.

XX Kim JP, Starr DB, Tam AW, Laurence ME, Michelotti EF;

PI Velligan MD, Latour DR, Thomas RL, Kongpachit A, Sheppard LT;

PI Lim MY, Bruice TW;

XX WPI; 2002-130595/17.

XX New nucleic acid regulatory sequences, which are able to regulate

PT expression of a gene operably linked to a promoter, useful for regulating
 PT the expression of transgenes and for treating e.g., cancer and
 XX immunological diseases.

Example 4; Page 50; 95pp; English.

CC The invention describes an isolated nucleic acid regulatory sequence for
 CC a cyclin D1 promoter, a CD40L promoter, vancomycin-resistant enterococci
 CC (VRE) promoter, an HBV promoter, androgen receptor (AR) promoter, Human
 CC epidermal growth factor receptor 2 (HER2) promoter, or a beta lactamase
 CC (Bla) promoter. Transcription regulatory sequences may be used to
 CC regulate expression of the endogenous, autologous or heterologous genes
 CC operably linked to the promoter, and may be incorporated into
 CC heterologous nucleic acid constructs for use in regulated expression of
 CC transgenes. Regulated expression of cyclin D1 can be used in cancer
 CC therapies, such as breast, colon or pancreatic cancers and familial
 CC adenomatous polyposis. Regulation of the activity of CD40L gene promoter
 CC may be used in the treatment of immunological disorders, such as
 CC autoimmune diseases e.g. multiple sclerosis (MS), systemic lupus
 CC erythematosus (SLE), graft-vs-host disease (GVHD) and rheumatoid
 CC arthritis. Regulated expression of genes under the control of the HBV
 CC (hepatitis B)-specific core, pre-S and X promoters can be used in the
 CC therapy of HBV disease, chronic hepatic insufficiency, cirrhosis,
 CC hepatocellular carcinoma, and in the regulated expression of liver cell-
 CC specific genes. Regulated expression of the vanH gene promoter can be
 CC used in treatment of Enterococcus infection, while regulated expression
 CC of the androgen receptor gene can be used in the treatment of prostate
 CC cancer. This sequence represents a mutated promoter region used in the
 CC invention to determine the regulatory regions involved in gene
 CC expression, described in the method of the invention

XX Sequence 10 BP; 1 A; 3 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GGCGGGCGG 10

DB 1 GGCGGGCGG 9

RESULT 506

ABL36369/c

ID ABL36369 standard; DNA; 10 BP.

XX ABL36369;

XX 22-APR-2002 (first entry)

XX Human lysosomal acid phosphatase 2 primer-extension oligonucleotide 5.

XX Human; ss; lysosomal acid phosphatase 2; ACP2; gene; chromosome 11;

KW lysosome-specific enzyme; orthophosphoric monoester hydrolysis;

KW Hodgkin's disease; HD; acid phosphatase deficiency;

KW novel polymorphic site; ACP2 haplotype; ACP2 genotype; polymorphism;

KW transgenic animal; primer; probe; primer-extension oligonucleotide; SNP;

XX single nucleotide polymorphism.

XX Homo sapiens.

XX WO200194362-A2.

XX 13-DEC-2001.

XX 07-JUN-2001; 2001WO-US018457.

XX 07-JUN-2000; 2000US-0210047P.

XX (GENA-) GENAISANCE PHARM INC.

XX Klem SE, Messer C, Tanguay DA;

DR WPI; 2002-154563/20.

XX Novel genetic variants of acid phosphatase 2, lysosomal polypeptide gene

PT useful in studying expression and function of the protein, and for

PT screening drugs to treat diseases e.g. Hodgkin's disease.

XX

XX

XX Claim 19; Page 15; 109pp; English.

XX

CC The invention comprises the human lysosomal acid phosphatase 2 (ACP2)

CC nucleic acid and protein sequences. Specifically, the invention relates

CC to the discovery of 22 novel polymorphic sites within the ACP2 gene. The

CC invention also comprises methods for haplotyping and genotyping the ACP2

CC gene in an individual. The ACP2 gene (located on chromosome 11) encodes a

CC lysosomal-specific enzyme that catalyses the hydrolysis of

CC orthophosphoric monoesters to alcohol and phosphate. The ACP2 gene and

CC protein are pharmaceutically important in the treatment of Hodgkin's

CC disease (HD) and acid phosphatase deficiency. The novel ACP2 gene

CC polymorphisms of the invention are useful in haplotyping the ACP2 gene.

CC ACP2 haplotyping is useful in validating ACP2 as a target (and designing

CC drugs) for treating an ACP2-related disease or condition (e.g. Hodgkin's

CC disease and acid phosphatase deficiency). The ACP2 gene polymorphisms are

CC useful for ACP2 genotyping, which can also be used to develop diagnostic

CC tests and therapeutic treatments. The ACP2 protein and nucleic acids of

CC the invention are useful in the production of a transgenic animal which

CC expresses ACP2 protein. The ACP2 nucleic acids of the invention are

CC useful in the production of allele-specific oligonucleotides designed to

CC genotype each of the ACP2 polymorphisms. Nucleic acids ABL36299-ABL36320

CC represent claimed ACP2 allele-specific probes. Nucleic acids ABL36321-

CC ABL36364 represent claimed ACP2 allele-specific PCR primers. Nucleic

CC acids ABL36365-ABL36408 represent claimed ACP2 primer-extension

CC oligonucleotides

XX

SQ Sequence 10 BP; 1 A; 8 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGGCGG 10

||| |||||

Db 9 GGTGGGCGG 1

RESULT 507

AA48132

ID AAL48132 standard; DNA; 10 BP.

XX

AC AAL48132;

XX

XX 27-SEP-2002 (first entry)

XX Human neuropeptide Y primer extension oligo SEQ ID NO: 56.

XX

XX Human; neuropeptide Y; NPY; isogene; SNP; atherosclerosis; obesity;

KW psychological disorder; single nucleotide polymorphism; alcoholism;

KW antiarteriosclerotic; anorectic; PCR; primer extension oligonucleotide;

ss.

XX Homo sapiens.

XX WO200251857-A1.

XX

XX 04-JUL-2002.

XX

XX 21-DEC-2000; 2000WO-US034758.

XX

XX 21-DEC-2000; 2000WO-US034758.

XX (GENA-) GENAISSANCE PHARM INC.

XX

XX Chew A, Denton RR, Lanz EM, Nandabalan K, Stephens JC;

XX WPI; 2002-566671/60.

XX

PT New genetic variants of the human Neuropeptide Y (NPY) gene useful for

PT treating disorders affected by abnormal expression or function of NPY

PT isogene e.g., atherosclerosis or obesity.

XX

XX Disclosure; Page 17; 80pp; English.

XX

CC The present invention provides the human neuropeptide Y (NPY) gene and

CC single nucleotide polymorphisms (SNPs) identified therein. The sequence

CC can be used in the treatment of disorders associated with NPY, including

CC atherosclerosis, obesity, psychological disorders and alcoholism. The

CC present sequence is an allele specific primer extension oligonucleotide

CC used to isolate the human NPY coding sequence

XX

SQ Sequence 10 BP; 1 A; 1 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGGCGG 10

||| |||||

Db 2 GCGGGGAGG 10

RESULT 508

AA48135

ID AAL48135 standard; DNA; 10 BP.

XX

AC AAL48135;

XX

XX 27-SEP-2002 (first entry)

XX Human neuropeptide Y primer extension oligo SEQ ID NO: 59.

XX

XX Human; neuropeptide Y; NPY; isogene; SNP; atherosclerosis; obesity;

KW psychological disorder; single nucleotide polymorphism; alcoholism;

KW antiarteriosclerotic; anorectic; PCR; primer extension oligonucleotide;

ss.

XX Homo sapiens.

XX WO200251857-A1.

XX

XX 04-JUL-2002.

XX

XX 21-DEC-2000; 2000WO-US034758.

XX

XX 21-DEC-2000; 2000WO-US034758.

XX (GENA-) GENAISSANCE PHARM INC.

XX

XX Chew A, Denton RR, Lanz EM, Nandabalan K, Stephens JC;

XX WPI; 2002-566671/60.

XX

PT New genetic variants of the human Neuropeptide Y (NPY) gene useful for

PT treating disorders affected by abnormal expression or function of NPY

PT isogene e.g., atherosclerosis or obesity.

XX

XX Disclosure; Page 17; 80pp; English.

XX

CC The present invention provides the human neuropeptide Y (NPY) gene and

CC single nucleotide polymorphisms (SNPs) identified therein. The sequence

CC can be used in the treatment of disorders associated with NPY, including

CC atherosclerosis, obesity, psychological disorders and alcoholism. The

CC present sequence is an allele specific primer extension oligonucleotide

CC used to isolate the human NPY coding sequence

XX

SQ Sequence 10 BP; 1 A; 1 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

```

Matches      8;  Conservative      0;  Mismatches      1;  Indels      0;  Gaps      0;

QY      2 GCGGGCGG 10
DB      |||||
        1 GCGGGGGG 9

RESULT 509
AAS95986/c
ID  AAS95986 standard; DNA; 10 BP.
XX
AC  AAS95986;
XX
DT  26-FEB-2002 (first entry)
XX
DE  Human CALM1 gene allele-specific oligonucleotide #95.
XX
KW  Calmodulin 1; CALM1; human; single nucleotide polymorphism; SNP;
KW  haplotyping; SCVA3; Alzheimer's disease; drug screening;
KW  calcium-dependent signal transduction; PCR primer; ss.
XX
OS  Homo sapiens.
XX
PN  WO200179218-A2.
XX
PD  25-OCT-2001.
XX
PF  09-APR-2001; 2001WO-US011509.
XX
PR  12-APR-2000; 2000US-0196340P.
XX
PA  (GENA-) GENAISANCE PHARM INC.
XX
PI  Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;
XX  WPI; 2002-049190/06.
XX
PT  New calmodulin-1 (CALM-1) isogene polymorphic variants, useful in
PT  expressing CALM1 protein for use in screening for candidate drugs to
PT  treat diseases related to CALM1 activity such as Alzheimer's disease.
XX
PS  Claim 17; Page 14; 82pp; English.
XX
CC  The invention relates to an isolated polynucleotide comprising a sequence
CC  selected from a polymorphic variant of calmodulin 1 (CALM1). The
CC  polymorphic variant comprises an CALM1 isogene defined by a haplotype
CC  selected from haplotypes 1-21 given in the specification. The
CC  polymorphisms are useful for studying the biological function of CALM1 as
CC  well as in identifying drugs targeting this protein for the treatment of
CC  a disorder related to its abnormal expression or function. The
CC  polymorphic variants may also be used in screening for compounds
CC  targeting CALM1 to treat a specific condition or disease predicted to be
CC  associated with CALM1 activity. Establishing CALM1 haplotype or haplotype
CC  pair of an individual is useful for improving the efficiency and
CC  reliability of several steps in the discovery and development of drugs
CC  for treating diseases associated with SCVA3 activity, e.g. Alzheimer's
CC  disease and diseases involving defects in calcium-dependent signal
CC  transduction. Haplotyping the CALM1 gene in an individual is also useful
CC  in the design of clinical trials of candidate drugs for treating a
CC  specific condition or disease predicted to be associated with CALM1
CC  activity. AAS95892-AAS96018 represent human CALM1 allele- specific
CC  oligonucleotides and PCR primers of the invention
XX
SQ  Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches      8;  Conservative      0;  Mismatches      1;  Indels      0;  Gaps      0;

QY      3 GCGGGCGG 11
DB      |||||
        10 GCGGGAGGC 2

RESULT 509
AAS95986/c
ID  AAS95986 standard; DNA; 10 BP.
XX
AC  AAS95986;
XX
DT  26-FEB-2002 (first entry)
XX
DE  Human CALM1 gene allele-specific oligonucleotide #95.
XX
KW  Calmodulin 1; CALM1; human; single nucleotide polymorphism; SNP;
KW  haplotyping; SCVA3; Alzheimer's disease; drug screening;
KW  calcium-dependent signal transduction; PCR primer; ss.
XX
OS  Homo sapiens.
XX
PN  WO200179218-A2.
XX
PD  25-OCT-2001.
XX
PF  09-APR-2001; 2001WO-US011509.
XX
PR  12-APR-2000; 2000US-0196340P.
XX
PA  (GENA-) GENAISANCE PHARM INC.
XX
PI  Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;
XX  WPI; 2002-049190/06.
XX
PT  New calmodulin-1 (CALM-1) isogene polymorphic variants, useful in
PT  expressing CALM1 protein for use in screening for candidate drugs to
PT  treat diseases related to CALM1 activity such as Alzheimer's disease.
XX
PS  Claim 17; Page 14; 82pp; English.
XX
CC  The invention relates to an isolated polynucleotide comprising a sequence
CC  selected from a polymorphic variant of calmodulin 1 (CALM1). The
CC  polymorphic variant comprises an CALM1 isogene defined by a haplotype
CC  selected from haplotypes 1-21 given in the specification. The
CC  polymorphisms are useful for studying the biological function of CALM1 as
CC  well as in identifying drugs targeting this protein for the treatment of
CC  a disorder related to its abnormal expression or function. The
CC  polymorphic variants may also be used in screening for compounds
CC  targeting CALM1 to treat a specific condition or disease predicted to be
CC  associated with CALM1 activity. Establishing CALM1 haplotype or haplotype
CC  pair of an individual is useful for improving the efficiency and
CC  reliability of several steps in the discovery and development of drugs
CC  for treating diseases associated with SCVA3 activity, e.g. Alzheimer's
CC  disease and diseases involving defects in calcium-dependent signal
CC  transduction. Haplotyping the CALM1 gene in an individual is also useful
CC  in the design of clinical trials of candidate drugs for treating a
CC  specific condition or disease predicted to be associated with CALM1
CC  activity. AAS95892-AAS96018 represent human CALM1 allele- specific
CC  oligonucleotides and PCR primers of the invention
XX
SQ  Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches      8;  Conservative      0;  Mismatches      1;  Indels      0;  Gaps      0;

QY      3 GCGGGCGG 11
DB      |||||
        10 GCGGGAGGC 2

RESULT 510
ACC41663
ID  ACC41663 standard; DNA; 10 BP.
XX
AC  ACC41663;
XX
DT  21-MAY-2003 (first entry)
XX
DE  Zinc finger protein DNA-binding domain target sequence SEQ ID NO:210.
XX
KW  Zinc finger domain; zinc finger; zinc finger binding domain; probe;
KW  chimeric nucleic acid; library; PCR primer; ss.
XX
OS  Synthetic.
XX
PN  WO2003016571-A1.
XX
PD  27-FEB-2003.
XX
PF  17-AUG-2002; 2002WO-KR001560.
XX
PR  17-AUG-2001; 2001US-0313402P.
XX
PR  22-APR-2002; 2002US-0374355P.
XX
PA  (TOOL-) TOOLGEN INC.
XX
PI  Kim J, Bae K, Park K, Kwon Y, Ryu E, Hwang M;
XX  WPI; 2003-268344/26.
XX
PT  New library comprising polypeptides having zinc finger domains, useful
PT  for producing chimeric nucleic acids.
XX
PS  Claim 40; Page 101; 234pp; English.
XX
CC  The present invention describes a library comprising polypeptides. Each
CC  polypeptide comprises a first or second zinc finger domain. The domains
CC  of each polypeptide are identical to a zinc finger domain from a
CC  naturally occurring protein and either do not occur in the same naturally
CC  occurring protein or occur in the same naturally occurring protein in a
CC  different configuration than in the polypeptide. The domains vary among
CC  polypeptides. Also described: (1) producing chimeric nucleic acids; (2)
CC  generating an artificial zinc finger polypeptide that specifically binds
CC  to a target DNA site; and (3) identifying a nucleic acid encoding a zinc
CC  finger polypeptide that specifically recognises a target DNA site. The
CC  library can be used for producing chimeric nucleic acids. ACC41551 to
CC  ACC41758 and ABR40919 to ABR41015 represent nucleotide and amino acid
CC  sequences given in the exemplification of the present invention
XX
SQ  Sequence 10 BP; 1 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match      46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches      8;  Conservative      0;  Mismatches      1;  Indels      0;  Gaps      0;

QY      5 GGGCGGCAT 13
DB      |||||
        2 GGGCGGCAT 10

RESULT 511
ABT14295/c
ID  ABT14295 standard; DNA; 10 BP.
XX
AC  ABT14295;
XX
DT  20-FEB-2003 (first entry)
XX
DE  Nucleic acid PCR amplification method-related RAPD PCR primer #65.
XX
KW  Nucleic acid amplification; nucleic acid analysis; DNA analysis; ss;
KW  RNA analysis; RAPD; PCR; primer; random amplified polymorphic DNA.

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XX OS Unidentified.
XX PN WO200281743-A2.
XX XX 17-OCT-2002.
XX PD 28-MAR-2002; 2002WO-GB001489.
XX PF 02-APR-2001; 2001GB-000008182.
XX PR (HAMI/) HAMILL B.
XX PA Hamill B;
XX PI WPI; 2003-075484/07.
XX DR Amplification of nucleotide sequences from polynucleotides by chain
XX PT extension of oligonucleotide primers, comprises 2 oligonucleotides in
XX PT solution, 2 attached to supports and both share complementary sequences.
XX PS Disclosure; Fig 17; 60pp; English.
XX XX
XX CC The invention comprises a method for the PCR amplification of nucleic
XX CC acids. The method involves a set of primers, where two of the primers are
XX CC in solution and at least two other primers are attached to a solid
XX CC support. The method of the invention can be used for the analysis of a
XX CC nucleic acid or a mixture of nucleic acids, including: single-stranded
XX CC DNA molecules, double-stranded DNA molecules and mRNA molecules. The
XX CC present DNA sequence represents a random amplified polymorphic DNA (RAPD)
XX CC PCR primer of the invention
XX SQ Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. NO. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGCGCATC 14
DB 10 GCGTGCATC 2

RESULT 512
ADA63313
ID ADA63313 standard; DNA; 10 BP.
XX AC ADA63313;
XX XX
XX DT 20-NOV-2003 (first entry)
XX DE Zinc finger target sequence DNA #335.
XX KW ds; target sequence; zinc finger protein;
XX KW multi-finger zinc finger protein; improved affinity;
XX KW improved specificity; enhanced biological activity.
XX OS Synthetic.
XX XX
XX PN US2003068675-A1.
XX XX 10-APR-2003.
XX PD
XX PF 20-NOV-2001; 2001US-00990186.
XX PR 24-MAR-1999; 99US-0126238P.
XX PR 24-MAR-1999; 99US-0126239P.
XX PR 30-JUL-1999; 99US-0146595P.
XX PR 30-JUL-1999; 99US-0146615P.
XX PR 23-MAR-2000; 2000US-0053500B.
XX PR 20-NOV-2000; 2000US-00716637.
XX PA (LIU/) LIU Q.

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XX LIU Q;
XX PI
XX DR WPI; 2003-567233/53.
XX XX
XX PT Designing zinc finger protein that has three zinc fingers from N-terminus
XX PT and C-terminus that bind to subsites in 3' to 5' direction, in a target
XX PT site, by selecting zinc fingers that bind their respective subsites.
XX XX
XX PS Disclosure; Page 18; 34pp; English.
XX XX
XX CC The invention relates to a method of designing a zinc finger protein. The
XX CC method is useful for designing a zinc finger protein. The method provides
XX CC multi-finger zinc finger proteins with improved affinity and specificity
XX CC for their target sequences, as well as enhanced biological activity. The
XX CC present sequence represents a zinc finger protein DNA target sequence.
XX SQ Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. NO. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GCGGCATCG 15
DB 1 GCGGCGTCG 9

RESULT 513
ADE11568/c
ID ADE11568 standard; DNA; 10 BP.
XX AC ADE11568;
XX XX
XX DT 29-JAN-2004 (first entry)
XX DE Heparin-binding protein related linker SEQ ID NO:26.
XX KW insoluble fusion protein; heparin-binding protein; HBP; antibacterial;
XX KW bacterial disease; linker; ss.
XX OS Synthetic.
XX XX
XX PN WO2003080660-A2.
XX PD 02-OCT-2003.
XX PF 26-MAR-2003; 2003WO-DK000207.
XX PR 27-MAR-2002; 2002DK-00000477.
XX PA (LEUK-) LEUKOTECH AS.
XX XX
XX PI Woeldike HF;
XX XX
XX DR WPI; 2003-876904/81.
XX XX
XX PT Preparing a fusion protein comprising a heparin-binding protein, a
XX PT cleavage site and a second polypeptide in recombinant bacterial cells
XX PT comprises obtaining a precipitate having the fusion protein in the
XX PT fraction of a host cell lysate.
XX XX
XX PS Example 3; SEQ ID NO 26; 64pp; English.
XX CC
XX CC The present invention describes a method for preparing an insoluble
XX CC fusion protein comprising a heparin-binding protein (HBP), a cleavage
XX CC site and a second polypeptide, in recombinant bacterial cells by
XX CC obtaining a precipitate comprising the fusion protein in the insoluble
XX CC fraction of a host cell lysate. Also described: (1) producing a
XX CC recombinant HBP in bacterial cells; (2) a DNA construct comprising a DNA
XX CC sequence encoding HBP, which is fused in frame to a DNA sequence encoding
XX CC a protease cleavage site, which in turn is fused in frame to a DNA
XX CC sequence encoding a second polypeptide; (3) a recombinant expression

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CC vector including the DNA construct of (2); and (4) a fusion protein
 CC comprising an amino acid sequence of HBP, an amino acid sequence of a
 CC second polypeptide and an amino acid sequence of a protease cleavage
 CC site, the amino acid sequence of the protease cleavage site being
 CC positioned between the amino acid sequences of HBP and the second
 CC polypeptide, where the second polypeptide provides the fusion protein
 CC with capabilities of forming insoluble aggregates in cytoplasm of
 CC bacteria after being expressed in the bacteria. HBP has antibacterial
 CC activity. The method is useful in producing an insoluble fusion protein.
 CC The fusion protein is useful for producing an HBP which may be used for
 CC preparing a medicament. The medicament may be used for treating mammals
 CC having a bacterial disease state. The present sequence represents a
 CC linker oligonucleotide which is used in the exemplification of the
 CC present invention.

XX SQ Sequence 10 BP; 1 A; 6 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGCGGCG 9
 Db 9 CGCGCGGCG 1

RESULT 514

ADH75124/c

ID ADH75124 standard; DNA; 10 BP.

XX AC ADH75124;

XX DT 22-APR-2004 (first entry)

XX DE Photodamage detection method related DNA #142.

XX KW Personal care method; photodamage; Serial Analysis of Gene Expression;

XX KW SAGE; sun-damage; pre-auricular skin; sun-protected post-auricular;

XX KW sun-protected epidermis; aging; dry skin; oily skin; photodamage marker;

XX KW ss.

XX OS Homo sapiens.

XX PN US2003152964-A1.

XX PD 14-AUG-2003.

XX PF 07-OCT-2002; 2002US-00266138.

XX PR 08-NOV-2001; 2001US-0338272P.

XX PA (UNIL) UNILEVER HOME & PERSONAL CARE USA DIV CO.

XX PI Iobst ST, Schilling KM, Boyd C, Urschitz J;

XX DR WPI; 2003-635999/60.

XX PT Personal care method for detecting photodamage, aging, dry or oily skin

XX PT comprises detecting gene markers upregulated in pre-auricular skin.

XX PS Example 2; Page 12; 25pp; English.

XX CC The invention describes a personal care method of detecting photodamage
 CC comprising comparative Serial Analysis of Gene Expression (SAGE) of sun-
 CC damaged pre-auricular skin and sun-protected post-auricular skin as well
 CC as sun-protected epidermis. The method involves: using at least one
 CC marker of photodamage comprising one of 15 fully defined sequences (S1-
 CC 15) as given in the specification; and detecting a change in the marker
 CC to determine the presence of photodamage. The method is useful for
 CC detecting photodamage, aging, dry skin or oily skin. This sequence
 CC represents a SAGE sequence tag used as a marker for detecting photodamage
 CC in skin.

SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGCGGCG 11
 Db 10 GCGGCGGCG 2

RESULT 515

ADH75019/c

ID ADH75019 standard; DNA; 10 BP.

XX AC ADH75019;

XX DT 22-APR-2004 (first entry)

XX DE Photodamage detection method related DNA #37.

XX KW Personal care method; photodamage; Serial Analysis of Gene Expression;

XX KW SAGE; sun-damage; pre-auricular skin; sun-protected post-auricular;

XX KW sun-protected epidermis; aging; dry skin; oily skin; photodamage marker;

XX KW ss.

XX OS Homo sapiens.

XX PN US2003152964-A1.

XX PD 14-AUG-2003.

XX PF 07-OCT-2002; 2002US-00266138.

XX PR 08-NOV-2001; 2001US-0338272P.

XX PA (UNIL) UNILEVER HOME & PERSONAL CARE USA DIV CO.

XX PI Iobst ST, Schilling KM, Boyd C, Urschitz J;

XX DR WPI; 2003-635999/60.

XX PT Personal care method for detecting photodamage, aging, dry or oily skin
 XX PT comprises detecting gene markers upregulated in pre-auricular skin.
 XX PS Example 2; Page 8; 25pp; English.
 XX CC The invention describes a personal care method of detecting photodamage
 XX CC comprising comparative Serial Analysis of Gene Expression (SAGE) of sun-
 XX CC damaged pre-auricular skin and sun-protected post-auricular skin as well
 XX CC as sun-protected epidermis. The method involves: using at least one
 XX CC marker of photodamage comprising one of 15 fully defined sequences (S1-
 XX CC 15) as given in the specification; and detecting a change in the marker
 XX CC to determine the presence of photodamage. The method is useful for
 XX CC detecting photodamage, aging, dry skin or oily skin. This sequence
 XX CC represents a SAGE sequence tag used as a marker for detecting photodamage
 XX CC in skin.

SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGCGGCG 11
 Db 10 GCGGCGGCG 2

RESULT 516

ADH75069/c

ID ADH75069 standard; DNA; 10 BP.

XX

AC ADH75069;
 XX
 DT 22-APR-2004 (first entry)
 DE
 DE Photodamage detection method related DNA #87.
 XX
 KW personal care method; photodamage; Serial Analysis of Gene Expression;
 KW SAGE; sun-damage; pre-auricular skin; sun-protected post-auricular;
 KW sun-protected epidermis; aging; dry skin; oily skin; photodamage marker;
 KW ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX US2003152964-A1.
 PN
 XX
 PD 14-AUG-2003.
 XX
 XX 07-OCT-2002; 2002US-00266138.
 PF
 XX
 XX 08-NOV-2001; 2001US-0338272P.
 PR
 XX
 XX (UNIL) UNILEVER HOME & PERSONAL CARE USA DIV CO.
 PA
 XX
 XX Iobst ST, Schilling KM, Boyd C, Urschitz J;
 PI
 XX
 XX WPI; 2003-635999/60.
 DR
 XX
 XX Personal care method for detecting photodamage, aging, dry or oily skin
 PT comprises detecting gene markers upregulated in pre-auricular skin.
 PT
 XX
 XX Example 2; Page 10; 25pp; English.
 PS
 XX
 CC The invention describes a personal care method of detecting photodamage
 CC comprising comparative Serial Analysis of Gene Expression (SAGE) of sun-
 CC damaged pre-auricular skin and sun-protected post-auricular skin as well
 CC as sun-protected epidermis. The method involves: using at least one
 CC marker of photodamage comprising one of 15 fully defined sequences (S1-
 CC 15) as given in the specification; and detecting a change in the marker
 CC to determine the presence of photodamage. The method is useful for
 CC detecting photodamage, aging, dry skin or oily skin. This sequence
 CC represents a SAGE sequence tag used as a marker for detecting photodamage
 CC in skin.
 CC
 XX
 SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. NO. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3 GCGGGCGGC 11
 DB 10 GCGGGCGGC 2
 RESULT 517
 ADI10077/C
 ID ADI10077 standard; cDNA; 10 BP.
 XX
 XX ADI10077;
 AC
 XX
 XX 22-APR-2004 (first entry)
 DT
 DE
 DE IL-1 activated HUVBC differential display primer #1.
 XX
 XX ss; PCR; primer; human; cardiovascular disease; atherosclerosis;
 KW ischaemia; reperfusion; hypertension; restenosis; arterial inflammation.
 KW
 XX
 XX Homo sapiens.
 OS
 XX
 XX US2002170077-A1.
 PN
 XX
 PD 14-NOV-2002.
 XX

PF 05-OCT-2001; 2001US-00970820.
 XX
 PR 10-FEB-1995; 95US-00386844.
 PR 22-OCT-1998; 98US-00176330.
 XX
 XX (MILL-) MILLENNIUM PHARM INC.
 PA
 XX Falb DA, Gimbrone MA;
 PI
 XX WPI; 2003-370721/35.
 DR
 XX
 XX New fingerprint genes useful for treating and diagnosing cardiovascular
 PT diseases, e.g. atherosclerosis, ischemia/reperfusion, or hypertension.
 PT
 XX
 XX Disclosure; SEQ ID NO 18; 93pp; English.
 PS
 XX
 CC The invention relates to a new isolated nucleic acid which comprises
 CC rchd005, rchd024, rchd032, rchd036, rchd502, rchd528, or rchd534
 CC genes. The nucleic acids are useful for treating and diagnosing
 CC cardiovascular diseases, such as atherosclerosis, ischaemia/reperfusion,
 CC hypertension, restenosis and arterial inflammation. The genes identified
 CC may be used diagnostically or as targets for therapeutic intervention.
 CC The present sequence represents a differential display primer.
 CC
 XX
 SQ Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. NO. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 6 GCGGGCGATC 14
 DB 10 GCGGGCGATC 2
 RESULT 518
 ABZ94851
 ID ABZ94851 standard; DNA; 10 BP.
 XX
 XX AC ABZ94851;
 XX
 DT 17-OCT-2003 (first entry)
 DT
 XX
 XX Human adenosine A1 receptor antisense fragment no.714.
 DE
 XX
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antinflammatory steroid; ubiquinone; antinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 KW
 XX
 OS Homo sapiens.
 XX
 XX WO200285308-A2.
 PN
 XX
 XX 31-OCT-2002.
 PD
 XX
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX
 XX WPI; 2003-229219/22.
 DR
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 10093; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ublquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. CC Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 10 BP; 1 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGG 10
|| || || || || || || ||
Db 2 GGAGGCGG 10

RESULT 519
ABZ94962
ID ABZ94962 standard; DNA; 10 BP.
XX AC ABZ94962;
XX 17-OCT-2003 (first entry)
XX Human adenosine A1 receptor antisense fragment no.825.
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ublquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX Homo sapiens.
XX OS
XX WO200285308-A2.
XX 31-OCT-2002.
XX 23-APR-2002; 2002WO-US013135.
XX 24-APR-2001; 2001US-0286137P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX Pharmaceutical composition for treating ailments associated with impaired PT respiration, has oligo(s) antisense to specific gene(s) or its PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or PT ublquinone.

XX PS Disclosure; SEQ ID NO 10204; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ublquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. CC Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 10 BP; 1 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GCGGCATCG 15
|| || || || || || || || ||
Db 1 GCGGCATCG 9

RESULT 520
ADM21517
ID ADM21517 standard; DNA; 10 BP.
XX AC ADM21517;
XX 20-MAY-2004 (first entry)
XX Synthetic zinc finger protein target DNA #335.
XX zinc finger protein; triplet target subsite; zinc finger motif; sp-1; ds.
OS Unidentified.
XX US2003104526-A1.
XX 05-JUN-2003.
XX 20-NOV-2001; 2001US-00989994.
XX 24-MAR-1999; 99US-0126238P.
PR 24-MAR-1999; 99US-0126239P.
PR 30-JUL-1999; 99US-0146595P.
PR 30-JUL-1999; 99US-0146615P.
PR 23-MAR-2000; 2000US-00535008.
PR 20-NOV-2000; 2000US-00716637.
XX (LIUQ/) LIU Q.
XX Liu Q;
XX WPI; 2003-843091/78.
XX New zinc finger protein used for recognizing triplet target subsites PT having nucleotide G in 5'-most position of subsite, that has been PT optimized with respect to location of subsite within target site.
XX Example 6; SEQ ID NO 1284; 48pp; English.

XX The invention describes a new zinc finger protein that binds to a target
 CC site comprising a first (F1), a second (F2) or a third (F3) zinc finger,
 CC ordered F1, F2 and F3 from N-terminus to C-terminus. The target site
 CC comprises, in the 3' to 5' direction, first (S1), second (S2) and third
 CC (S3) target subites. The zinc finger proteins can be used for
 CC recognising triplet target subites having the nucleotide G in the 5'-
 CC most position of the subite, that has been optimised with respect to the
 CC location of the subite within the target site. This sequence represents
 CC the target polynucleotide of a synthetic zinc finger protein of the
 CC invention.

XX SQ Sequence 10 BP; 0 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GCGGCATCG 15
 DB 1 GCGGCGTCG 9
 |||||

RESULT 521

ADL96231
 ID ADL96231 standard; DNA; 10 BP.

XX AC ADL96231;

XX 20-MAY-2004 (first entry)

XX CD15+ myeloid cell associated probe seqid 129.

XX cytostatic; gene therapy; microarray; gene expression characteristic;
 KW haematopoietic cell; haematopoiesis; myeloid leukaemia; probe;
 KW CD15+ myeloid cell; ss.

XX Homo sapiens.

XX US2003165949-A1.

XX 04-SEP-2003.

XX 23-DEC-2002; 2002US-00329465.

XX 27-DEC-2001; 2001US-0343826P.

XX (WANG/) WANG S M.

XX (LEES/) LEE S.

XX (CHEN/) CHEN J.

XX (ZHOU/) ZHOU G.

XX (ROWL/) ROWLEY J D.

XX Wang SM, Lee S, Chen J, Zhou G, Rowley JD;

XX WPI; 2003-863699/80.

XX New microarray for measuring gene expression characteristics of
 PT hematopoietic cells, useful for preparing a composition for diagnosing or
 PT treating myeloid leukemia.

XX Claim 1; SEQ ID NO 129; 32pp; English.

XX The invention describes a microarray for measuring gene expression
 CC characteristics of haematopoietic cells comprising at least 5
 CC polynucleotides having distinct sequences. Also described are: a method
 CC of diagnosing or treating an abnormality associated with haematopoiesis;
 CC and diagnosing myeloid leukaemia in a patient. The microarray is useful
 CC for preparing a composition for diagnosing or treating myeloid leukaemia.
 CC This sequence represents a polynucleotide probe comprising a portion of
 CC an expressed gene isolated from a population of CD15+ myeloid cells and
 CC suitable for use in the microarray of the invention.

XX

SQ Sequence 10 BP; 1 A; 4 C; 5 G; 0 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCGG 9
 DB 2 CGACGGGCG 10
 |||||

RESULT 522

ADM77084/c

XX ADM77084 standard; cDNA; 10 BP.

XX AC ADM77084;

XX 03-JUN-2004 (first entry)

XX Photodamage marker #91.

XX ss; photodamage; skin; aging; drying; human.

XX Homo sapiens.

XX US2003170739-A1.

XX 11-SEP-2003.

XX 07-OCT-2002; 2002US-00265509.

XX 08-NOV-2001; 2001US-0337856P.

XX (UNIL) UNILEVER HOME & PERSONAL CARE USA DIV CO.

XX Tobst ST, Schilling KM, Boyd C, Urschitz J;

XX WPI; 2003-830613/77.

XX Detection of skin conditions e.g. photodamage, aging and drying,
 PT comprises using polynucleotide sequences in gene arrays as markers, and
 PT detecting a change in the markers.

XX Example 2; Page 10; 21pp; English.

XX The invention relates a method to the detection of photodamage comprising
 CC using a marker of photodamage and detecting a change in the marker to
 CC determine the presence of photodamage. The marker is a nucleic acid
 CC having cDNA sequence of 11 or 10 base pairs. Detection is done by
 CC comparing a first skin sample with a second skin sample to determine a
 CC change in a marker. The method is used for detecting a skin condition,
 CC e.g. photodamage, aging and drying. The method provides an easy way to
 CC track expression of even small numbers of genes in laboratory models or
 CC in human tissue. The present sequence represents a photodamage marker
 CC used in the method of the invention.

XX SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGGCGG 11
 DB 10 GCCGGGCGG 2
 |||||

RESULT 523

ADM77139/c

XX ADM77139 standard; cDNA; 10 BP.

XX AC ADM77139;

XX

```

DT 03-JUN-2004 (first entry)
XX
DE Photodamage marker #146.
XX
KW ss; photodamage; skin; aging; drying; human.
XX
OS Homo sapiens.
XX
PN US2003170739-A1.
XX
PD 11-SEP-2003.
XX
PF 07-OCT-2002; 2002US-00265509.
XX
PR 08-NOV-2001; 2001US-0337856P.
XX
PA (UNIL ) UNILEVER HOME & PERSONAL CARE USA DIV CO.
XX
PI Iobst ST, Schilling KM, Boyd C, Urschitz J;
XX
DR WPI; 2003-830613/77.
XX
PT Detection of skin conditions e.g. photodamage, aging and drying,
PT comprises using polynucleotide sequences in gene arrays as markers, and
PT detecting a change in the markers.
XX
PS Example 2; Page 12; 21pp; English.
XX
CC The invention relates a method to the detection of photodamage comprising
CC using a marker of photodamage and detecting a change in the marker to
CC determine the presence of photodamage. The marker is a nucleic acid
CC having cDNA sequence of 11 or 10 base pairs. Detection is done by
CC comparing a first skin sample with a second skin sample to determine a
CC change in a marker. The method is used for detecting a skin condition,
CC e.g. photodamage, aging and drying. The method provides an easy way to
CC track expression of even small numbers of genes in laboratory models or
CC in human tissue. The present sequence represents a photodamage marker
CC used in the method of the invention.
XX
SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGC 11
Db 10 GCGGGCGGC 2

RESULT 524
ADM77030/c
ID ADM77030 standard; cDNA; 10 BP.
XX
AC ADM77030;
XX
DT 03-JUN-2004 (first entry)
XX
DE Photodamage marker #37.
XX
KW ss; photodamage; skin; aging; drying; human.
XX
OS Homo sapiens.
XX
PN US2003170739-A1.
XX
PD 11-SEP-2003.
XX
PF 07-OCT-2002; 2002US-00265509.
XX
PR 08-NOV-2001; 2001US-0337856P.
XX
PA (UNIL ) UNILEVER HOME & PERSONAL CARE USA DIV CO.

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XX Iobst ST, Schilling KM, Boyd C, Urschitz J;
XX WPI; 2003-830613/77.
XX
PT Detection of skin conditions e.g. photodamage, aging and drying,
PT comprises using polynucleotide sequences in gene arrays as markers, and
PT detecting a change in the markers.
XX
PS Example 2; Page 9; 21pp; English.
XX
CC The invention relates a method to the detection of photodamage comprising
CC using a marker of photodamage and detecting a change in the marker to
CC determine the presence of photodamage. The marker is a nucleic acid
CC having cDNA sequence of 11 or 10 base pairs. Detection is done by
CC comparing a first skin sample with a second skin sample to determine a
CC change in a marker. The method is used for detecting a skin condition,
CC e.g. photodamage, aging and drying. The method provides an easy way to
CC track expression of even small numbers of genes in laboratory models or
CC in human tissue. The present sequence represents a photodamage marker
CC used in the method of the invention.
XX
SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGC 11
Db 10 GCGGGCGGC 2

RESULT 525
ABD18810
ID ABD18810 standard; DNA; 10 BP.
XX
AC ABD18810;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human adenosine A1 receptor oligonucleotide fragment 825.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

```

XX PS Claim 15; SEQ ID NO 10204; 763pp; English.

XX CC This invention describes a novel composition (a) a first active agent,

XX CC comprising oligonucleotides, effective for alleviating

XX CC bronchoconstriction, respiratory tract inflammation, allergies and

XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

XX CC surfactant depletion or hyposecretion, when administered to a mammal. The

XX CC oligonucleotides are derived from a gene encoding or regulating

XX CC expression of a target polypeptide associated with lung airway or lung

XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

XX CC The invention also describes a kit, that comprises: (a) a delivery

XX CC device, in separate containers, (b) the oligonucleotides, (c)

XX CC instructions for adding a carrier and for use of the kit. The composition

XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

XX CC beta-adrenergic agonist. The composition is useful for preventing or

XX CC treating a respiratory, lung or malignant disease. The administered

XX CC composition comprises oligo and is administered to reduce the production

XX CC or availability, or to increase the degradation of the target mRNA or to

XX CC reduce the amount of target polypeptide present in the lungs. The

XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung

XX CC inflammation, allergies and/or surfactant hypoproduction are associated

XX CC with a disease or condition such as pulmonary vasoconstriction,

XX CC inflammation, allergies, asthma, impeded respiration, respiratory

XX CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

XX CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.

XX CC The reduced adenosine content of the anti-sense oligos corresponding to

XX CC thymidines present in the target RNA serves to prevent the breakdown of

XX CC the oligonucleotides into products that free adenosine into the system

XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

XX CC prevent any unwanted effects due to it

XX CC

SQ Sequence 10 BP; 1 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GCGGCATCG 15

DB 1 GCGGCATCG 9

RESULT 526

ABD18699

ID ABD18699 standard; DNA; 10 BP.

XX AC ABD18699;

XX AC ABD18699;

XX DT 29-JUL-2004 (first entry)

XX DE Human adenosine A1 receptor oligonucleotide fragment 714.

XX KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

XX KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;

XX KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX KW pulmonary transplantation rejection; ds.

XX OS Homo sapiens.

XX OS WO200285309-A2.

XX PN 31-OCT-2002.

XX PD 23-APR-2002; 2002WO-US013143.

XX PF 24-APR-2001; 2001US-0286036P.

XX PR

XX XX (EPIG-) EPIGENESIS PHARM INC.

XX PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX XX WPI; 2003-093058/08.

XX XX Pharmaceutical composition for treating asthma, has antisense

XX PT oligonucleotide containing less percentage of adenosine, targeted to

XX PT nucleic acids associated with lung airway or lung dysfunction, and

XX PT bronchodilating agent.

XX XX Claim 15; SEQ ID NO 10093; 763pp; English.

XX CC This invention describes a novel composition (a) a first active agent,

XX CC comprising oligonucleotides, effective for alleviating

XX CC bronchoconstriction, respiratory tract inflammation, allergies and

XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

XX CC surfactant depletion or hyposecretion, when administered to a mammal. The

XX CC oligonucleotides are derived from a gene encoding or regulating

XX CC expression of a target polypeptide associated with lung airway or lung

XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

XX CC The invention also describes a kit, that comprises: (a) a delivery

XX CC device, in separate containers, (b) the oligonucleotides, (c)

XX CC instructions for adding a carrier and for use of the kit. The composition

XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic, is a

XX CC beta-adrenergic agonist. The composition is useful for preventing or

XX CC treating a respiratory, lung or malignant disease. The administered

XX CC composition comprises oligo and is administered to reduce the production

XX CC or availability, or to increase the degradation of the target mRNA or to

XX CC reduce the amount of target polypeptide present in the lungs. The

XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung

XX CC inflammation, allergies and/or surfactant hypoproduction are associated

XX CC with a disease or condition such as pulmonary vasoconstriction,

XX CC inflammation, allergies, asthma, impeded respiration, respiratory

XX CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

XX CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.

XX CC The reduced adenosine content of the anti-sense oligos corresponding to

XX CC thymidines present in the target RNA serves to prevent the breakdown of

XX CC the oligonucleotides into products that free adenosine into the system

XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

XX CC prevent any unwanted effects due to it

XX CC

SQ Sequence 10 BP; 1 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;

Best Local Similarity 88.9%; Pred. No. 2.8e+02;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGCGGCGG 10

DB 2 GCGCGGCGG 10

RESULT 527

ADZ99487/c

ID ADZ99487 standard; cDNA; 10 BP.

XX AC ADZ99487;

XX AC ADZ99487;

XX DT 14-JUL-2005 (first entry)

XX DE Human photodamage marker EST 3.

XX DE aging; nootropic; dermatological; degeneration; selectable marker; EST;

XX KW expressed sequence tag; ss.

XX OS Homo sapiens.

XX OS JP2003210200-A.

XX PN

```

XX PD 29-JUL-2003.
XX PF 15-OCT-2002; 2002JP-00300615.
XX PR 08-NOV-2001; 2001US-0338272P.
XX PA (UNIL ) UNILEVER LTD.
XX WPI; 2003-819839/77.
XX DR
XX PT Personal care method of detecting photodamage, useful for comprehensive
XX PT study of skin conditions to elucidate new pathways, involves detecting
XX PT change in marker of photodamage.
XX PS Example 2; Page 12; 67pp; Japanese.
XX CC The invention relates to a novel method of detecting photodamage
XX CC comprising detecting a change in a photodamage marker. Photodamage is an
XX CC environmentally-induced remodeling of the dermis that arises as a result
XX CC of repeated exposure of skin to sunlight. It has been suggested that
XX CC photoaging is the predominant contributing factor to the prematurely-aged
XX CC appearance of sun-exposed skin. The method of the invention may be useful
XX CC for detecting photodamage and for comprehensive skin condition studies to
XX CC elucidate new pathways. The current sequence is that of a human
XX CC photodamage marker EST (expressed sequence tag) of the invention which is
XX CC most abundant in post-auricular skin. The current sequence was identified
XX CC via comparison of SAGE (serial analysis of gene expression) libraries for
XX CC pre- and post-auricular skin.
XX SQ Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGC 11
DB 10 GCGGGCGGC 2

RESULT 528
ADP91289/c
ID ADF91289 standard; DNA; 10 BP.
AC ADF91289;
DT 26-FEB-2004 (first entry)
XX PCR primer for IL-1 induction/differential display OPE7.
XX Human; ss; differential display; cardiovascular disease; interleukin-1;
XX IL-1; shear stress; high fat diet; high cholesterol diet;
XX multiple transmembrane domain receptor target; atherosclerosis;
XX ischaemia; reperfusion; hypertension; restenosis; inflammation; PCR;
XX primer.
XX Homo sapiens.
XX US2003188327-A1.
XX 02-OCT-2003.
XX 02-JUL-2002; 2002US-00186950.
XX 10-FEB-1995; 95US-00386844.
XX 07-JUN-1995; 95US-00485573.
XX 09-FEB-1996; 96US-00599654.
XX 06-OCT-1997; 97US-00944496.
XX 11-AUG-1999; 99US-00371900.
XX (WILL-) MILLENNIUM PHARM INC.
XX PA
XX
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PI Falb DA, Gimbrone MA;
XX WPI; 2004-041208/04.
XX Isolated nucleic acid for use in treatment of cardiovascular diseases
XX e.g. atherosclerosis, contains nucleotide of sequences having specified
XX number of base pairs or nucleotide sequence of gene or gene fragment
XX contained in specified clones.
XX Example; SEQ ID NO 18; 130pp; English.
XX The invention relates to an isolated nucleic acid (appearing as ADF91272-
XX ADF91278 and ADF91307 which are up regulated or down regulated
XX (differentially displayed) in individuals genetically predisposed to
XX cardiovascular disease. It may be up regulated by treatment with
XX interleukin (IL)-1 or treatment with shear stress. It may be down
XX regulated by treatment of individuals with high fat/high cholesterol
XX diet. Also included are a nucleotide vector containing the nucleotide
XX sequence, a genetically engineered host cell containing the nucleotide
XX sequence, a pure gene product encoded by the nucleic acid, an antibody
XX that immunospecifically binds the gene product, diagnosing cardiovascular
XX disease (comprising detecting a gene or its gene product that is
XX differentially expressed in cardiovascular disease states), treating
XX cardiovascular disease (comprising administering a compound that
XX modulates the synthesis or expression of a target gene or the activity of
XX the target gene product to a patient), monitoring the efficacy of a
XX compound in clinical trials for the treatment of cardiovascular disease
XX (comprising detecting a gene or its gene product, which is differentially
XX expressed in cardiovascular disease states), and identifying a compound
XX that modulates the activity of multiple transmembrane domain receptor
XX target gene product (comprising: contacting a first cell expressing the
XX multiple transmembrane domain receptor target gene product with a test
XX compound and activator of the multiple transmembrane domain receptor
XX target gene product; measuring the level of intracellular calcium release
XX within the first cell; and comparing the level to that of a second
XX multiple transmembrane domain receptor target gene product that expresses
XX the cell that has been contacted with the activator but not with the test
XX compound so that if the level of intracellular calcium release within the
XX first cell differs from that of the second cell, the compound that
XX modulates the activity of the multiple transmembrane domain receptor
XX target product has been identified). The invention is for use in the
XX treatment and diagnosis of cardiovascular disease e.g. atherosclerosis,
XX ischaemia/reperfusion, hypertension, or restenosis and arterial
XX inflammation. The invention permits the definition of disease pathways
XX and the identification of targets in the pathway that are useful both
XX diagnostically and therapeutically. It provides a simple and rapid
XX approach to the identification of useful therapeutics. The present
XX sequence is a PCR primer used to isolate cDNA differentially displayed
XX according to the invention.
XX SQ Sequence 10 BP; 3 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 GCGGCGATC 14
DB 10 GCGGCGATC 2

RESULT 529
ADH57741/c
ID ADH57741 standard; DNA; 10 BP.
XX AC ADH57741;
XX 25-MAR-2004 (first entry)
XX DT
XX DE Extendable oligo E230 for DNA sequencing and PCR amplification.
XX ss; primer library; extendable oligo; EO; ligation chain reaction; LCR;
XX rolling circle amplification; strand displacement amplification;
XX
```

KW isothermal DNA amplification; biotechnology; agriculture;
 KW medical research; 2,4 diaminopurine nucleotide analogue; PCR; primer.
 XX Synthetic.
 OS
 PN WO2003093500-A1.
 XX
 PD 13-NOV-2003.
 XX
 XX 24-DEC-2002; 2002WO-AU001763.
 XX
 XX 01-MAY-2002; 2002AU-00002045.
 XX
 XX (NUCL-) NUCLEICS PTY LTD.
 XX
 XX Tillett D, Thomas T;
 XX WPI; 2004-053046/05.
 DR
 XX
 XX Increasing the affinity of an extendable oligonucleotide (EO) for a
 PT target nucleic acid, for providing primers having improved specificity,
 PT comprises hybridization of the EO to a template oligonucleotide (TO) and
 PT extension of the EO.
 XX
 XX Example 9; Page 42; 85pp; English.
 PS
 XX This invention relates to a novel method for the optimisation of primer
 CC libraries. Specifically, it refers to increasing the affinity of short
 CC oligonucleotide primers, also known as extendable oligos (EOs), for their
 CC template sequences. The present invention describes improved methods for
 CC sequencing and the linear and exponential amplification of DNA that can
 CC be useful for PCR, RT-PCR, ligation chain reaction (LCR), rolling circle
 CC amplification, strand displacement amplification and isothermal DNA
 CC amplification. Accordingly, these extendable oligos with improved
 CC specificity and affinity are particularly important in fields ranging
 CC from biotechnology and agriculture to medical research. This
 CC oligonucleotide sequence is an extendable oligonucleotide that includes
 CC an adenine replacement 2,4 diaminopurine nucleotide analogue in the catch
 CC region, and is useful for both DNA sequencing reactions and PCR
 CC amplification in an exemplification of the invention.
 XX
 XX Sequence 10 BP; 0 A; 5 C; 4 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGCGCGGCG 9
 DB |||||
 9 CGCGGACG 1
 RESULT 530
 ADH57677/C
 ID ADH57677 standard; DNA; 10 BP.
 XX
 AC ADH57677;
 XX
 XX 25-MAR-2004 (first entry)
 DT
 XX
 XX Extendable oligo E166 for DNA sequencing and PCR amplification.
 DE
 XX ss; primer library; extendable oligo; EO; ligation chain reaction; LCR;
 XX rolling circle amplification; strand displacement amplification;
 KW isothermal DNA amplification; biotechnology; agriculture;
 KW medical research; 2,4 diaminopurine nucleotide analogue; PCR; primer.
 XX
 XX Synthetic.
 OS
 XX WO2003093500-A1.
 PN
 XX 13-NOV-2003.
 PD
 XX

PF 24-DEC-2002; 2002WO-AU001763.
 XX
 PR 01-MAY-2002; 2002AU-00002045.
 XX
 PA (NUCL-) NUCLEICS PTY LTD.
 XX
 XX Tillett D, Thomas T;
 XX WPI; 2004-053046/05.
 DR
 XX
 XX Increasing the affinity of an extendable oligonucleotide (EO) for a
 PT target nucleic acid, for providing primers having improved specificity,
 PT comprises hybridization of the EO to a template oligonucleotide (TO) and
 PT extension of the EO.
 XX
 XX Example 9; Page 41; 85pp; English.
 PS
 XX This invention relates to a novel method for the optimisation of primer
 CC libraries. Specifically, it refers to increasing the affinity of short
 CC oligonucleotide primers, also known as extendable oligos (EOs), for their
 CC template sequences. The present invention describes improved methods for
 CC sequencing and the linear and exponential amplification of DNA that can
 CC be useful for PCR, RT-PCR, ligation chain reaction (LCR), rolling circle
 CC amplification, strand displacement amplification and isothermal DNA
 CC amplification. Accordingly, these extendable oligos with improved
 CC specificity and affinity are particularly important in fields ranging
 CC from biotechnology and agriculture to medical research. This
 CC oligonucleotide sequence is an extendable oligonucleotide that includes
 CC an adenine replacement 2,4 diaminopurine nucleotide analogue in the catch
 CC region, and is useful for both DNA sequencing reactions and PCR
 CC amplification in an exemplification of the invention.
 XX
 XX Sequence 10 BP; 0 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CGCGCGGCG 9
 DB |||||
 9 CGCGGACG 1
 RESULT 531
 ADJ65134/C
 ID ADJ65134 standard; DNA; 10 BP.
 XX
 AC ADJ65134;
 XX
 XX 20-MAY-2004 (first entry)
 DT
 XX
 XX N. crassa frq gene proximal LRE imperfect repeat #2.
 DE
 XX Light responsive element; frq gene; LRE; imperfect repeat; ds; WC-1;
 KW WC-2; white collar complex; flavin adenine dinucleotide; FAD;
 KW transactivator.
 KW
 XX Neurospora crassa.
 OS
 XX US2004038400-A1.
 PN
 XX 26-FEB-2004.
 PD
 XX 26-AUG-2002; 2002US-00228876.
 PF
 XX 26-AUG-2002; 2002US-00228876.
 PR
 XX (FROE/) FROEHLICH A C.
 PA (LORO/) LOROS J.
 PA (DUNL/) DUNLAP J C.
 XX
 XX Froehlich AC, Loros J, Dunlap JC;
 XX

DR WPI; 2004-203233/19.
 XX Regulating expression of a gene in a cell comprises contacting a cell
 PT containing FAD and a gene operatively linked to a light-responsive
 PT regulatory sequence with a WC-1/WC-2 transactivator.
 XX
 XX PS
 XX Claim 3; SEQ ID NO 2; 21pp; English.
 XX
 CC The invention relates to regulating expression of a gene in a cell
 CC comprising contacting a cell containing flavin adenine dinucleotide (FAD)
 CC and a gene operatively-linked to a light-responsive regulatory sequence
 CC with a white collar (WC)-1/WC-2 transactivator that binds FAD and the
 CC light-responsive regulatory sequence. Also included are a light-
 CC responsive regulatory sequence (or light responsive element, LRE)
 CC appearing as ADJ65133, ADJ65134, ADJ65135, and ADJ65136(LRES from the N.
 CC crassa frq gene promoter) and a kit comprising a WC-1/WC-2 transactivator
 CC and a light-responsive regulatory sequence. The method and kit are useful
 CC for regulating gene expression using light. The present sequence is an
 CC LRE (comprising an imperfect repeat) from the Neurospora crassa frq gene
 CC promoter which binds the WC-1/WC-2 transactivators.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 7 GCGGCATCG 15
 Db 9 GCGGCATCG 1
 |||||
 |||||
 RESULT 532
 ADM76272
 ID ADM76272 standard; DNA; 10 BP.
 AC ADM76272;
 XX
 XX 03-JUN-2004 (first entry)
 DT
 XX NEPHA gene transcriptional control region GATA-1 binding site.
 DE
 XX Human; NEPHA; ephrin receptor; brain; chromosome 1; apoptosis;
 KW drug screening; antisense therapy; gene therapy; cancer; tumour;
 KW lung cancer; ovarian cancer; breast cancer; cervical cancer;
 KW prostate cancer; bladder cancer; stomach cancer; colorectal cancer;
 KW cytostatic; transcriptional control region; promoter;
 KW transcription factor binding site; ds.
 XX
 XX Homo sapiens.
 OS
 XX
 XX JP2003289876-A.
 PN
 XX 14-OCT-2003.
 PD
 XX
 XX 05-APR-2002; 2002JP-00103497.
 PF
 XX 05-APR-2002; 2002JP-00103497.
 PR
 XX (TAKE) TAKEDA CHEM IND LTD.
 PA
 XX WPI; 2004-038434/04.
 DR
 XX Novel antisense oligonucleotide useful as anticancer agent for preventing
 FT cancer e.g. lung cancer, stomach cancer, breast cancer.
 PT
 XX Example 2; Page 26; 38pp; Japanese.
 PS
 XX The invention relates to antisense oligonucleotides (ADM76030 and
 CC ADM76031) targeted to the human NEPHA gene (ADM76029), which encodes a
 CC novel brain-derived ephrin receptor (ADM76028). The NEPHA protein has
 CC 50.7% homology to the human EphA7 ephrin receptor and its gene is located
 CC on chromosome 1. Ephrin receptors are overexpressed in various cancers

CC and it has been found that inhibition of NEPHA expression promotes
 CC apoptosis. The invention also relates to the NEPHA transcriptional
 CC control (promoter) region (ADM76037); recombinant vectors and host cells
 CC comprising the NEPHA promoter operably linked to a reporter gene; a
 CC method of screening for compounds which inhibit or activate transcription
 CC of the NEPHA gene; and pharmaceutical compositions comprising an
 CC antisense oligonucleotide or a transcriptional inhibitor or activator.
 CC The antisense oligonucleotides and modulators of NEPHA transcription are
 CC useful for inducing apoptosis for the treatment and/or prevention of
 CC cancers in which NEPHA is overexpressed such as lung cancer, ovarian
 CC cancer, breast cancer, cervical cancer, prostate cancer, bladder cancer,
 CC stomach cancer and colorectal cancer. Sequences ADM76038-ADM76371
 CC represent transcription factor binding sites within the transcriptional
 CC control region of the NEPHA gene.
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 8 CGGCATCGT 16
 Db 1 CGGCATCGT 9
 |||||
 |||||
 RESULT 533
 ADN89076
 ID ADN89076 standard; DNA; 10 BP.
 XX
 XX AC ADN89076;
 XX
 XX 15-JUL-2004 (first entry)
 DT
 XX Hyperlipidemia treatment associated human ITGB3 haplotype probe #141.
 DE
 KW ss; probe; antilipemic; gene therapy; allele; polymorphic site;
 KW integrin beta 3; ITGB3; statin response marker; hyperlipidemia.
 XX
 XX Homo sapiens.
 OS
 XX WO2004033710-A2.
 PN
 XX 22-APR-2004.
 PD
 XX 09-OCT-2003; 2003WO-US032361.
 PF
 XX 09-OCT-2002; 2002US-0417743P.
 PR
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 XX Bentivegna SC, Bieglecki KM, Brain CD, Dain BJ, Cappola G;
 PI Judson RS, Lachowicz M, Lee HH, Litvyn L, Messer C, Petersen N;
 PI Reed CR, Rounds EM, Russo DP, Windemuth AK;
 XX WPI; 2004-340942/31.
 DR
 XX New kit comprising a set of oligonucleotides, useful for determining
 PT whether an individual has a statin response marker I or II for preparing
 PT a composition for treating hyperlipidemia.
 XX
 XX Claim 13; SEQ ID NO 144; 202pp; English.
 PS
 XX A kit comprising a set of oligonucleotides designed for identifying at
 CC least one of the alleles at each polymorphic site (PS) in a set of 129
 CC polymorphic sites (PSs) given in the specification, is new. The kit
 CC identifies at least one of the alleles at each polymorphic site (PS) in a
 CC set of 129 polymorphic sites (PSs) given in the specification, for
 CC example: PS1 and PS42; PS19 and PS42; PS3, PS12, and PS42; a set of
 CC polymorphic sites comprising a linked haplotype to any one of haplotypes
 CC 101-194, 201-463 or 501-515 given in the specification; or a set of
 CC polymorphic sites comprising a substitute haplotype for any one of
 CC haplotypes 101-194, 201-463 or haplotypes 501-515 given in the

specification; where the nucleotide position of each polymorphic site corresponds to the following nucleotide position in the 32577-bp sequence: 1118 (PS1), 1773 (PS3), 1875 (PS4), 1911 (PS5), 1957 (PS6), 2087 (PS10), 2157 (PS12), 13384 (PS15), 13405 (PS16), 16200 (PS19), 17194 (PS20), 17273 (PS21), 20035 (PS26), 20047 (PS28), 20615 (PS30), 21944 (PS33), 22155 (PS35), 25705 (PS37), 25921 (PS38), 27882 (PS39), and 30618 (PS42). INDEPENDENT CLAIMS are also included for: determining whether an individual has a statin response marker I or a statin response marker II; selecting a statin therapy to provide an optimal High Density Lipoprotein Cholesterol (HDL) response in an individual; predicting an individual's High Density Lipoprotein Cholesterol (HDL) response to treatment with a statin; predicting an individual's HDL response to treatment with a statin; manufacturing a drug product; seeking regulatory approval for marketing a pharmaceutical formulation for treating a disease or condition in a population partially or wholly defined by having a statin response marker I; marketing a drug product comprising a statin as at least one active ingredient for treating a disease or condition in a population partially or wholly defined by having a statin response marker I; an isolated polynucleotide comprising a first nucleotide sequence which comprises an integrin, beta 3 (ITGB3) isogene encoding a ITGB3 polypeptide, where the ITGB3 isogene consisting of isogenes 1-38 and 40-98 defined by a correspondingly numbered haplotype, where each of the isogenes comprises nucleotides 1000-2235, 4256-4716, 1317913723, 14235-14858, 16126-16619, 16930-17414, 19241-19644, 19748-20177, 2053721009, 21731-22412, 24385-24930, 25559-26029, 27822-28255, 30265-30754, and 31300-31718 of the 32577-bp sequence, except where substituted by the sequence of alleles for the correspondingly numbered haplotype at the polymorphic sites whose nucleotide positions in the 32577-bp sequence and a second nucleotide sequence which is complementary to the first nucleotide sequence; a recombinant nonhuman organism transformed or transfected with the isolated polynucleotide, where the organism expresses an ITGB3 polypeptide encoded by the selected ITGB3 isogene; an isolated fragment of an integrin, beta 3 (ITGB3) isogene, where the fragment comprises one or more polymorphisms consisting of thymine at PS 1, guanine at PS2, cytosine at PS3, thymine at PS4, cytosine at PS5, adenine at PS6, thymine at PS7, thymine at PS8, guanine at PS9, adenine at PS10, adenine at PS11, thymine at PS12, adenine at PS13, guanine at PS16, adenine at PS18, thymine at PS19, guanine at PS21, guanine at PS22, cytosine at PS23, cytosine at PS24, thymine at PS25, adenine at PS26, adenine at PS27, thymine at PS29, adenine at PS30, cytosine at PS31, guanine at PS32, adenine at PS33, adenine at PS35, cytosine at PS37, thymine at PS38, cytosine at PS39, adenine at PS40, thymine at PS41, thymine at PS42, guanine at PS43 and guanine at PS44; a genome anthology for the integrin, beta 3 (ITGB3) gene which comprises two or more ITGB3 isogenes consisting of isogenes 1-98, where each of the selected isogenes is defined by a correspondingly numbered haplotype given in the specification, and where each of the isogenes comprises nucleotides 1000-2235, 4256-4716, 13179-13723, 14235-14858, 16126-16619, 16930-17414, 19241-19644, 19748-20177, 2053721009, 21731-22412, 24385-24930, 2555926029, 27822-28255, 30265-30754, and 31300-31718 of the 32577-bp sequence except where substituted by the sequence of alleles for the correspondingly numbered haplotype at each of file polymorphic sites; haplotyping the integrin, beta 3 (ITGB3) gene of an individual; assigning a haplotype pair for the integrin, beta 3 (ITGB3) gene to an individual; reducing the potential for bias in a clinical trial of a candidate drug for treating a disease or condition predicted to be associated with ITGB3 activity; an isolated polypeptide comprising a ITGB3 protein variant consisting of protein variants A, B, C, D, E, F and G and comprising 788-amino acid sequence, except where substituted by the corresponding sequence of amino acids whose positions and alleles are given in the specification; an isolated monoclonal antibody specific for and immunoreactive with the selected ITGB3 protein variant comprising the isolated polypeptide; screening for drugs targeting the selected ITGB3 protein variant comprising the isolated polypeptide; an isolated fragment of an ITGB3 protein variant, where the fragment is at least 6 amino acids in length and comprises one or more variant amino acids consisting of methionine at a position corresponding to amino acid position 14, arginine at a position corresponding to amino acid position 66, methionine at a position corresponding to amino acid position 445, and glutamine at a position corresponding to amino acid position 515 the 788-amino acid sequence; screening for drugs targeting the selected ITGB3 protein variant comprising the isolated polypeptide; screening for compounds targeting the ITGB3 protein to treat a condition

or disease predicted to be associated with ITGB3 activity; validating the ITGB3 protein as a candidate target for treating a medical condition predicted to be associated with ITGB3 activity; and an isolated oligonucleotide designed for detecting a polymorphism in the integrin, beta 3 (ITGB3) gene at a polymorphic site (PS) consisting of PS1-PS44, where the oligonucleotide contains or is located one to several nucleotides downstream of the selected PS, where the oligonucleotide has a length of about 15 to about 100 nucleotides. Preferred kit: The kit further comprises a manual with instructions for performing one or more reactions on a human nucleic acid sample to identify the allele(s) present in the individual at each polymorphic site in the set of polymorphic sites and determining if the individual has a statin response marker I or a statin response marker II based on the identified allele(s). The set of oligonucleotides is designated for identifying both alleles at each polymorphic site of the selected set of polymorphic sites. The set of PSs comprises PS3, PS12 and PS42; PS1, PS12 and PS42; PS3 and PS42; PS1 and PS42; PS1, PS3, PS12 and PS42; or PS39. The set of PSs is PS3, PS12 or PS42. The individual is Caucasian. The linkage disequilibrium between the linked haplotype and any one of haplotypes 101-194, 201-463 or 501-515 has $\delta_{gr}2$ consisting of at least 0.75, at least 0.80, at least 0.85, at least 0.90, at least 0.95 or 1.0. At least one of the oligonucleotides in the set of oligonucleotides is an allele-specific oligonucleotide comprising a nucleotide sequence consisting of 10-15 bp. The set of polymorphic sites is PS3, PS12, and PS42 and the set of oligonucleotides comprises first, second and third allele-specific oligonucleotide (ASO) probes, where the first ASO probe comprises 15-bp sequence, or its complement, and S in the 15-bp sequence is guanine; the second ASO probe comprises 15-bp sequence, or its complement, and Y in the 15-bp sequence is cytosine, and the third ASO probe comprises 15 bp, or its complement, and Y in the 15-bp sequence is cytosine. Preferred Article: The article of manufacture comprises a pharmaceutical formulation and at least one indicium identifying a population for whom the pharmaceutical formulation is indicated, where the pharmaceutical formulation comprises a statin as at least one active ingredient and the identified population is partially or wholly defined by having a statin response marker I, where a trial population having the statin response formulation than to treatment with atorvastatin or salt of atorvastatin acid. It also comprises packaging material and a pharmaceutical formulation contained within the packaging material, where the pharmaceutical formulation comprises a statin as at least one separate active ingredient, and the packaging material comprises an approved label which states that the pharmaceutical formulation is indicated for a population partly or wholly defined by having a statin response marker I, where a trial population having the statin response marker exhibits a better HDLC response to the pharmaceutical formulation than to treatment with atorvastatin or a salt of atorvastatin acid. Preferred Oligonucleotide: The isolated oligonucleotide is an allele-specific oligonucleotide that specifically hybridizes to an allele of the ITGB3 gene at a region containing the polymorphic site. The isolated oligonucleotide is a primer-extension oligonucleotide. The kit is for haplotyping the integrin, beta 3 (ITGB3) gene of all individual, comprises a set of oligonucleotides designed for identifying at least one of the alleles at each polymorphic site (PS) in a set of two or more polymorphic sites. Preferred Method: Determining whether an individual has a statin response marker I or a statin response marker II comprises determining the copy number in the individual of the haplotype, where if the selected haplotype is one of haplotypes given in the specification, then the individual has a statin response marker I if the individual has at least one copy of the selected haplotype and a statin response marker II if the individual has zero copy of the selected haplotype; and the individual has a statin response marker I if the individual has zero or one copy of the selected haplotype and a statin response marker II if the individual has two copies of the selected haplotype. The individual is a candidate for treatment with a statin. The determining step comprises genotyping each polymorphic site in a set of polymorphic sites comprising the selected haplotype and using the results of the genotyping step to identify, for the set of polymorphic sites the haplotype pair present in the individual. The determining step comprises consulting a data repository, that provides information on the copy number present in the individual for the selected haplotype. The data repository is the individual's medical records or a medical data card. Assigning an individual to a first or second statin response marker group comprises

CC determining the copy number in the individual or a haplotype and
 CC assigning the individual to the first statin response marker group if the
 CC individual has at least one copy of the selected haplotype and to the
 CC second statin response marker group if the individual has zero copy of
 CC the selected haplotype; and assigning the individual to the first statin
 CC response marker group if the individual has zero or one copy of the
 CC selected haplotype and to the second statin response marker group if the
 CC individual has two copies of the selected haplotype. The determining step
 CC comprises genotyping each polymorphic site in a set of polymorphic sites

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGGGC 11
 |||||
 Db 2 GCGGGAGC 10

RESULT 534

ADS76373
 ID ADS76373 standard; DNA; 10 BP.

XX AC ADS76373;

DT 30-DEC-2004 (first entry)

DE Breast cancer detection oligonucleotide #155.

XX ss; primer; cytostatic; RNA interference; RNAi; Gene silencing;
 KW antisense oligonucleotide inhibitor; cathepsin K inhibitor;
 KW cathepsin L inhibitor; cathepsin F inhibitor;
 KW metalloprotease 2 inhibitor; thrombospondin-2 antagonist;
 KW collagen antagonist; diagnosis; breast tissue; cancer.

XX Homo sapiens.

XX WO2004085621-A2.

XX 07-OCT-2004.

XX 22-MAR-2004; 2004WO-US008866.

XX 20-MAR-2003; 2003US-0456735P.

XX (DAND) DANA FARBER CANCER INST INC.

XX Polyak K, Porter D, Allinen M;

XX WPI; 2004-728732/71.

XX Diagnosing breast cancer comprises determining expression levels of a
 PT gene selected from those differentially expressed in normal or cancerous
 PT cells of a breast tissue sample including interleukin 1, thrombospondin 1
 PT and cystatin C.

PS Example 2; SEQ ID NO 155; 149pp; English.

XX The invention relates to a method of diagnosis (M1) comprising: (a)
 CC providing a test sample of breast tissue; (b) determining the level of
 CC expression in the test sample of a gene (e.g. interleukin-8, superoxide
 CC dismutase 2 and tubulin, alpha 3) selected from Table 1 given in the
 CC specification, and (c) if the gene is expressed in the test sample at a
 CC lower level than in a control normal breast tissue sample, diagnosing the
 CC test sample as containing cancer cells. The method is used for diagnosing
 CC breast cancer. This sequence corresponds to an oligonucleotide primer
 CC used in the method of the invention.

XX Sequence 10 BP; 1 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGCGGGCG 9
 |||||
 Db 2 CGACGGCG 10

RESULT 535

ADS77067/c
 ID ADS77067 standard; DNA; 10 BP.

XX AC ADS77067;

XX 30-DEC-2004 (first entry)

XX Breast cancer detection oligonucleotide #849.

XX ss; primer; cytostatic; RNA interference; RNAi; Gene silencing;
 KW antisense oligonucleotide inhibitor; cathepsin K inhibitor;
 KW cathepsin L inhibitor; cathepsin F inhibitor;
 KW metalloprotease 2 inhibitor; thrombospondin-2 antagonist;
 KW collagen antagonist; diagnosis; breast tissue; cancer.

XX Homo sapiens.

XX WO2004085621-A2.

XX 07-OCT-2004.

XX 22-MAR-2004; 2004WO-US008866.

XX 20-MAR-2003; 2003US-0456735P.

XX (DAND) DANA FARBER CANCER INST INC.

XX Polyak K, Porter D, Allinen M;

XX WPI; 2004-728732/71.

XX Diagnosing breast cancer comprises determining expression levels of a
 PT gene selected from those differentially expressed in normal or cancerous
 PT cells of a breast tissue sample including interleukin 1, thrombospondin 1
 PT and cystatin C.

PS Example 2; SEQ ID NO 849; 149pp; English.

XX The invention relates to a method of diagnosis (M1) comprising: (a)
 CC providing a test sample of breast tissue; (b) determining the level of
 CC expression in the test sample of a gene (e.g. interleukin-8, superoxide
 CC dismutase 2 and tubulin, alpha 3) selected from Table 1 given in the
 CC specification, and (c) if the gene is expressed in the test sample at a
 CC lower level than in a control normal breast tissue sample, diagnosing the
 CC test sample as containing cancer cells. The method is used for diagnosing
 CC breast cancer. This sequence corresponds to an oligonucleotide primer
 CC used in the method of the invention.

XX Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2.8e+02;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGC 11
 |||||
 Db 10 GCGGGCGC 2

RESULT 536

ADS77761/c
 ID ADS77761 standard; DNA; 10 BP.

XX AC ADS77761;

XX 30-DEC-2004 (first entry)

PT gene selected from those differentially expressed in normal or cancerous
PT cells of a breast tissue sample including interleukin 1, thrombospondin 1
PT and cystatin C.

XX Example 6; SEQ ID NO 1348; 149pp; English.

PS The invention relates to a method of diagnosis (M1) comprising: (a)
CC providing a test sample of breast tissue; (b) determining the level of
CC expression in the test sample of a gene (e.g. interleukin-8, superoxide
CC dismutase 2 and tubulin, alpha 3) selected from Table 1 given in the
CC specification, and (c) if the gene is expressed in the test sample at a
CC lower level than in a control normal breast tissue sample, diagnosing the
CC test sample as containing cancer cells. The method is used for diagnosing
CC breast cancer. This sequence corresponds to an oligonucleotide primer
CC used in the method of the invention.

XX Sequence 10 BP; 0 A; 6 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGC 11
|| |||||
Db 10 GCCGGCGGC 2

RESULT 539
ADU18834

ID ADU18834 standard; DNA; 10 BP.

XX AC ADU18834;

XX DT 13-JAN-2005 (first entry)

XX DE Hypoxia-related tumorigenesis-related SAGE tag #625.

XX KW screening; hypoxia-related tumorigenesis;

XX KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.

XX OS Unidentified.

XX PN WO2004092198-A2.

XX PD 28-OCT-2004.

XX PF 09-APR-2004; 2004WO-US011087.

XX PR 09-APR-2003; 2003US-0461712P.

XX PA (GENZ) GENZYME CORP.

XX PI Nacht M;

XX DR WPI; 2004-758333/74.

XX PT Identifying agents that alter biological activity of a polypeptide
PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
PT comprises contacting an agent with a target cell and monitoring activity
PT of expressed product.

XX PS Disclosure; Page 68; 100pp; English.

XX CC The invention comprises a method of screening for candidate agents
CC capable of altering the biological activity of a protein encoded by a
CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
CC invention involves: contacting a test agent with a target cell expressing
CC the nucleotide, and monitoring the activity of the expressed protein
CC product; if the test agent modifies the activity of the expressed protein
CC then this is a candidate agent. The method of the invention is useful for
CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
CC or treating tumours. The present DNA sequence represents a SAGE tag that
CC was used in the exemplification of the invention.

XX Sequence 10 BP; 1 A; 3 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 GCGGCATCG 15
|||||||
Db 1 GCGGCATCG 9

RESULT 540

ADU18663

ID ADU18663 standard; DNA; 10 BP.

XX AC ADU18663;

XX DT 13-JAN-2005 (first entry)

XX DE Hypoxia-related tumorigenesis-related SAGE tag #454.

XX KW screening; hypoxia-related tumorigenesis;

XX KW hypoxia-induced gene regulation; tumour; SAGE tag; ds.

XX OS Unidentified.

XX PN WO2004092198-A2.

XX PD 28-OCT-2004.

XX PF 09-APR-2004; 2004WO-US011087.

XX PR 09-APR-2003; 2003US-0461712P.

XX PA (GENZ) GENZYME CORP.

XX PI Nacht M;

XX DR WPI; 2004-758333/74.

XX PT Identifying agents that alter biological activity of a polypeptide
PT encoded by a polynucleotide involved in hypoxia-related tumorigenesis
PT comprises contacting an agent with a target cell and monitoring activity
PT of expressed product.

XX PS Disclosure; Page 65; 100pp; English.

XX CC The invention comprises a method of screening for candidate agents
CC capable of altering the biological activity of a protein encoded by a
CC nucleotide involved in hypoxia-related tumorigenesis. The method of the
CC invention involves: contacting a test agent with a target cell expressing
CC the nucleotide, and monitoring the activity of the expressed protein
CC product; if the test agent modifies the activity of the expressed protein
CC then this is a candidate agent. The method of the invention is useful for
CC modifying hypoxia-induced gene regulation and for diagnosing, prognosing
CC or treating tumours. The present DNA sequence represents a SAGE tag that
CC was used in the exemplification of the invention.

XX Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 46.3%; Score 7.4; DB 1; Length 10;
Best Local Similarity 88.9%; Pred. No. 2.8e+02;
Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GCGCGCAT 13
|||||||
Db 1 GGACGGCAT 9

RESULT 541

ADU18279

ID ADU18279 standard; DNA; 10 BP.


```

PT occur.
PS Example 1; SEQ ID NO 8; 22pp; Japanese.
XX
CC This invention relates to a novel method of stabilizing a gene
CC amplification reagent. The method involves utilizing a chimeric
CC oligonucleotide primer for amplifying an oligonucleotide which is
CC substantially complementary to the primer, where the ratio of the value of
CC the primer and the oligonucleotide is 1.2-3.3 and the gene amplification
CC reagent comprises the chimeric oligonucleotide primer, and blocking the
CC 3' terminal of the oligonucleotide, such that its expansion does not
CC occur. The method enables effective and improved stabilization of gene
CC amplification reagents. The present sequence is that of a PCR primer
CC which was used in the exemplification of the invention.
XX
SQ Sequence 10 BP; 0 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match      46.3%; Score 7.4; DB 1; Length 10;
  Best Local Similarity 88.9%; Pred. No. 2.8e+02;
  Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 GCGGGCGGC 11
Db 2 GCTGGCGGC 10

RESULT 544
ADV92177
ID ADV92177 standard; DNA; 10 BP.
XX
AC ADV92177;
XX
DT 07-APR-2005 (first entry)
XX
DE Universal bacterial 16S rRNA BSR1407/16-based probe.
XX
KW DNA detection; ss; rRNA; probe.
XX
OS Bacteria.
XX
PN WO2005003384-A1.
XX
PD 13-JAN-2005.
XX
PF 05-JUL-2004; 2004WO-DK000480.
XX
PR 03-JUL-2003; 2003DK-00001018.
PR 03-JUL-2003; 2003US-0484926P.
XX
XX (DAOG-) DANMARKS OG GRONLANDS GEOLOGISKE UNDERSO.
XX
XX Bender M, Jacobsen CS;
XX
XX WPI; 2005-101503/11.
XX
XX Selective detection of target nucleic acid sequence in a sample comprises
XX contacting the sample with nucleic acid probe.
XX
XX Disclosure; Page 19; 67pp; English.
XX
XX The invention relates to detecting the presence or absence of at least
XX one target nucleic acid sequence in a sample (that further contains a
XX nucleic acid molecule comprising a sequence corresponding to the target
XX nucleic acid sequence) comprises contacting the sample with at least one
XX nucleic acid probe that is capable of selectively binding to a continuum
XX of at least a part of the nucleic acid molecule corresponding to the
XX target nucleic acid sequence and a part of the nucleic acid molecule
XX adjacent to the corresponding sequence. Also included are a composition
XX or a kit, used in the method above each comprising at least one nucleic
XX acid probe that is capable of selectively binding to a continuum of at
XX least a part of the nucleic acid molecule corresponding to the target
XX nucleic acid sequence and a part of the nucleic acid molecule adjacent to
XX the corresponding sequence. The method further comprises contacting the

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CC sample with a first extendable primer. Binding of the nucleic acid probe
CC to the nucleic acid molecule comprising a sequence corresponding to the
CC target nucleic acid sequence prevents annealing of the extendable primer
CC and/or extension of the primer (i.e. is a blocking probe). The continuum
CC of at least a part of the nucleic acid molecule corresponding to the
CC target nucleic acid sequence and a part of the nucleic acid molecule
CC adjacent to the corresponding sequence comprises a transcription
CC initiation site and its upstream sequence. The method, composition, and
CC kit are useful for detecting the presence or absence of at least one
CC target nucleic acid sequence in a sample that further contains a nucleic
CC acid molecule comprising a sequence corresponding to the target nucleic
CC acid sequence. The present sequence is probe for a universal bacterial
CC rRNA gene (based on prior art primers deposited in the European ribosomal
XX RNA database), used in the method of the invention.
XX
SQ Sequence 10 BP; 1 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match      46.3%; Score 7.4; DB 1; Length 10;
  Best Local Similarity 88.9%; Pred. No. 2.8e+02;
  Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCGGGCGGC 10
Db 1 GACGGGCGG 9

RESULT 545
ADE14348
ID ADE14348 standard; DNA; 12 BP.
XX
AC ADE14348;
XX
DT 29-JAN-2004 (first entry)
XX
DE Optineurin promoter motif, repeat element or regulatory region #457.
XX
KW Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
XX SNP; glaucoma; progressive ocular hypertensive disorder;
XX glaucoma related disorder; motif; repeat element; regulatory region.
XX
XX Homo sapiens.
XX
XX US2003190617-A1.
XX
XX 09-OCT-2003.
XX
XX 06-MAR-2002; 2002US-00091281.
XX
XX 06-MAR-2002; 2002US-00091281.
XX
XX (STEE/) SI E.
XX (RAYM/) RAYMOND V.
XX (MORI/) MORISSETTE J.
XX
XX Raymond V, Morissette J, Si E;
XX
XX WPI; 2003-864168/80.
XX
XX New nucleic acid sequences of the optineurin gene are useful to detect
XX polymorphisms particularly single nucleotide polymorphisms in the
XX optineurin promoter to diagnose, prognose and treat glaucoma and related
XX disorders.
XX
XX Claim 11; SEQ ID NO 459; 159pp; English.
XX
XX The invention relates to an isolated nucleic acid (N1) comprising at
XX least 20 but not more than 1500 consecutive nucleotides of the optineurin
XX promoter appearing as ADE13890. Also included are the optineurin promoter
XX operably linked to a heterologous nucleic acid, a nucleic acid capable of
XX detecting a single nucleotide polymorphism (SNP) in the optineurin
XX promoter, a host cell comprising the promoter operably linked to a
XX heterologous sequence, diagnosing or prognosing glaucoma in a sample
XX obtained from a cell or bodily fluid (comprising detecting a polymorphism

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CC in a promoter region of the optineurin gene, associated with a glaucoma
 CC phenotype), detecting a SNP sequence variation in a sample containing
 CC DNA, detecting the presence of an optineurin promoter sequence variation
 CC in a sample containing DNA, determining the presence or increased
 CC susceptibility to glaucoma or to a progressive ocular hypertensive
 CC disorder resulting in loss of visual field in a patient (or the severity
 CC or progression of glaucoma in a patient, comprising providing
 CC amplification reaction primers that direct amplification of a selected
 CC nucleic acid region containing the variation within the optineurin
 CC promoter and amplifying the DNA) and detecting a polymorphism (comprising
 CC obtaining a sample containing human genomic DNA, providing a nucleic acid
 CC capable of detecting a SNP located within an optineurin promoter, and
 CC detecting the polymorphism). The invention is used to diagnose and
 CC prognose glaucoma and also to treat glaucoma related disorders. The
 CC present sequence is an optineurin promoter motif, repeat element or
 CC putative regulatory region.

XX
 SQ Sequence 12 BP; 1 A; 7 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 45.0%; Score 7.2; DB 1; Length 12;
 Best Local Similarity 75.0%; Pred. No. 3.9e+02;
 Matches 9; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 CGCGCGGCGGCA 12
 |||||
 DB 1 CGCGCGGCGGCA 12

RESULT 546
 AAQ22679
 ID AAQ22679 standard; DNA; 10 BP.

AC AAQ22679;

DT 15-JUL-1992 (first entry)

DE PCR primer to detect Mycobacteria genus species.

XX Amplification; DNA polymerase; rapid; sensitive; ss.

OS Synthetic.

XX JP04036199-A.

PD 06-FEB-1992.

XX 31-MAY-1990; 90JP-00142582.

XX 31-MAY-1990; 90JP-00142582.

XX (IATR) IATRON LABORATORIES.

XX WPI; 1992-092902/12.

XX
 PT Detection of Mycobacteria genus microbe - by amplifying mixed soln.
 PT contg. DNA primers contg. oligo-nucleotide parts, and DNA polymerase and
 PT aq. liq. sample specimen.

PS Claim 1; Page 1; 8pp; Japanese.

XX The primer was synthesised using a 380A-DNA synthesiser along with
 CC another primer (AAQ22680). They were eluted from the column by 27 percent
 CC aq. ammonia and heated to 55 deg C overnight. The soln. was diluted, fed
 CC to OPC and the elute washed three times with dil. aq. ammonia, dH2O and
 CC TPA. The nucleotides were eluted with 20 percent acetonitrile to give
 CC pure oligonucleotides. DNAs were extracted from cultures of human
 CC Mycobacterium tuberculosis, chicken M. avium, etc. and amplified using
 CC the above primers. The PCR prod. from all was a 236 bp fragment with a
 CC different restriction fragment pattern from each species. The method can
 CC detect the presence and type of various acid-fast bacteria (Mycobacteria)
 CC in a sample specimen, specifically and rapidly with high sensitivity

XX Sequence 10 BP; 2 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 43.8%; Score 7; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 3.4e+02;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 GCGGCAT 13
 |||||
 DB 3 GCGGCAT 9

RESULT 547
 AAQ90120/c
 ID AAQ90120 standard; cDNA; 10 BP.

XX AAQ90120;

XX 25-MAR-2003 (revised)

DT 05-NOV-1995 (first entry)

XX PCR primer for the TCI gene.

XX Tumour marker; invasive; metastatic; cancer; ss; palindromic PCR.

OS Synthetic.

XX WO9511923-A1.

XX 04-MAY-1995.

XX 31-OCT-1994; 94WO-US012502.

XX 29-OCT-1993; 93US-00146488.

XX (DAND) DANA FARBER CANCER INST INC.

XX Chen LB, Bao S, Liu Y;

XX WPI; 1995-178826/23.

XX New tumour marker TCI, corresp. DNA and monoclonal antibody - for
 PT detecting, preventing and treating tumours, esp. in breast, colon and
 PT gastrointestinal tract cancer.

XX Disclosure; Page 8; 84pp; English.

XX The sequence is that of a PCR primer used to isolate the TCI gene which
 CC encodes the TCI tumour marker protein, by palindromic PCR. The gene and
 CC its product may be used to detect tumours in blood, urine or sputum.
 CC Inhibitors of TCI are used to treat late stage cancers and for preventing
 CC tumour cell metastasis. See also AAQ90112-25. (Updated on 25-MAR-2003 to
 CC correct PN field.)

XX Sequence 10 BP; 0 A; 5 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 43.8%; Score 7; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 3.4e+02;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGGCGGG 7
 |||||
 DB 10 CGGCGGG 4

RESULT 548
 AAQ47401
 ID AAQ47401 standard; DNA; 10 BP.

XX AAQ47401;

XX 10-NOV-1998 (first entry)

XX Antisense oligonucleotide 901, targeting adenosine A1 receptor.

KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..10
 FT /tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 PN WO9823294-A1.
 XX
 PD 04-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US022017.
 XX
 PR 26-NOV-1996; 96US-00757024.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1998-322464/28.
 XX
 XX Treating respiratory disease with antisense sequences directed against
 XX adenosine or bradykinin receptors - with localised delivery to the
 XX respiratory system, suitable for long term treatment of asthma, adult
 XX respiratory distress syndrome etc.
 XX
 PS Claim 12; Page 8-24; 47pp; English.
 XX
 CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 10 BP; 1 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
 XX
 Query Match 43.8%; Score 7; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 3.4e+02;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GGCGGGC 8
 Db 2 GGCGGGC 8
 |||||
 |||||
 RESULT 549
 AAV47380
 ID AAV47380 standard; DNA; 10 BP.
 XX
 AC AAV47380;
 XX
 DT 10-NOV-1998 (first entry)
 XX
 DE Antisense oligonucleotide 880, targeting adenosine A1 receptor.
 XX
 KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.

KW allergy; emphysema; cystic fibrosis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..10
 FT /tag= a
 FT /note= "contains phosphorothioate internucleotide
 FT linkages"
 XX
 PN WO9823294-A1.
 XX
 PD 04-JUN-1998.
 XX
 PF 26-NOV-1997; 97WO-US022017.
 XX
 PR 26-NOV-1996; 96US-00757024.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 1998-322464/28.
 XX
 XX Treating respiratory disease with antisense sequences directed against
 XX adenosine or bradykinin receptors - with localised delivery to the
 XX respiratory system, suitable for long term treatment of asthma, adult
 XX respiratory distress syndrome etc.
 XX
 PS Claim 12; Page 8-24; 47pp; English.
 XX
 CC Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
 CC human adenosine A1 receptor, the design of which required the secondary
 CC structure of this targets mRNA. The adenosine receptor mRNA secondary
 CC structure was both analysed and used to construct antisense
 CC oligonucleotides containing a phosphorothioate backbone. Once the
 CC antisense molecules are created they can be used to target their
 CC predetermined target, thus causing the gene product to decrease. The
 CC antisense oligonucleotides were targeted to specific mRNA regions
 CC containing either a junction between the intron and exon, or where they
 CC may overlap the initiation codon. The receptor is a member of the G-
 CC protein coupled family of cell surface receptors that have 7-
 CC transmembrane segments. These oligonucleotides can be used to treat or
 CC prevent conditions associated with bronchoconstriction and/or lung
 CC inflammation in humans or other animals e.g. asthma, pulmonary disease,
 CC allergy, emphysema and cystic fibrosis
 XX
 SQ Sequence 10 BP; 1 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
 XX
 Query Match 43.8%; Score 7; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 3.4e+02;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 GGCGGGC 8
 Db 4 GGCGGGC 10
 |||||
 |||||
 RESULT 550
 AAV47391
 ID AAV47391 standard; DNA; 10 BP.
 XX
 AC AAV47391;
 XX
 DT 10-NOV-1998 (first entry)
 XX
 DE Antisense oligonucleotide 891, targeting adenosine A1 receptor.
 XX
 KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;
 KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;
 KW allergy; emphysema; cystic fibrosis; ss.
 XX